REVISION HISTORY BG-3S CHASSIS

MODEL

KV-XG29M85

PART NO.: 9-872-263-01

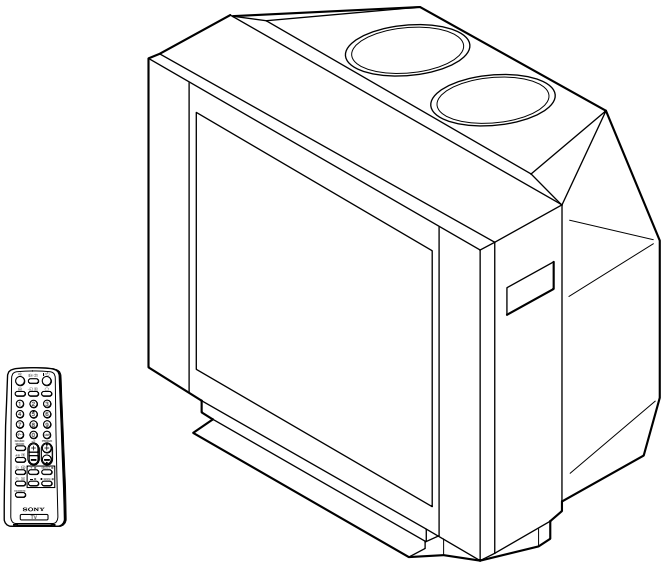
NO	DATE	DESCRIPTION OF REVISION

Self Diagnosis
Supported model

SERVICE MANUAL BG-3S CHASSIS

MODEL	COMMANDER	DEST.
KV-XG29M85	RM-952	Pakistan

MODEL	COMMANDER	DEST.



TRINITRON® COLOR TV

SONY®

SPECIFICATIONS

			Note
Power requirements	110-240 V AC, 50/60 Hz		
Power consumption (W)	Indicated on the rear of the TV		
Television system	B/G, I, D/K, M		
Color system	PAL, PAL 60, SECAM, NTSC3.58, NTSC4.43		
Teletext Language	English, Arabic, French		
Channel coverage			
B/G	VHF: E2 to E12 / UHF: E21 to E69 / CATV: S01 to S03, S1 to S41		
I	UHF: B21 to B68, CATV: S01 to S03, S1 to S41		
D/K	VHF: C1 to C12, R1 to R12 / UHF: C13 to C57, R21 to R60 / CATV: S01 to S03, S1 to S41, Z1 to Z39		
M	VHF: A2 to A13 / UHF: A14 to A79 / CATV: A-8 to A-2, A to W+4, W+6 to W+84		
┐┌ (Antenna)	75-ohm external terminal		
Audio output (Speaker)	5W + 5W		
3D WOOFER	12W		
Number of terminal			
Video	Input: 3* Output: 1	Phono jacks; 1 V_{P-P}, 75 ohms	* Two input line available
♪ Audio	Input: 3* Output: 1	Phono jacks; 500 mVrms	* Two input line available
Earphone)	Output: 1	Stereo minijack	
Picture tube	29 in.		
Tube size (cm)	72		Measured diagonally
Screen size (cm)	68		Measured diagonally
Dimension (w/h/d, mm)	794 x 589 x 517		
Mass (kg)	54		

Design and specifications are subject to change without notice.

CAUTION

SHORT CIRCUIT THE ANODE OF THE PICTURE TUBE AND THE ANODE CAP TO THE METAL CHASSIS, CRT SHIELD, OR CARBON PAINTED ON THE CRT, AFTER REMOVING THE ANODE.

SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY SHADING AND MARK ⚠ ON THE SCHEMATIC DIAGRAMS, EXPLODED VIEWS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

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SELF DIAGNOSTIC FUNCTION

The units in this manual contain a self-diagnostic function. If an error occurs, the STANDBY/TIMER lamp will automatically begin to flash.
The number of times the lamp flashes translates to a probable source of the problem. A definition of the STANDBY/TIMER lamp flash indicators is listed in the instruction manual for the user's knowledge and reference. If an error symptom cannot be reproduced, the remote commander can be used to review the failure occurrence data stored in memory to reveal past problems and how often these problems occur.

1. DIAGNOSTIC TEST INDICATORS

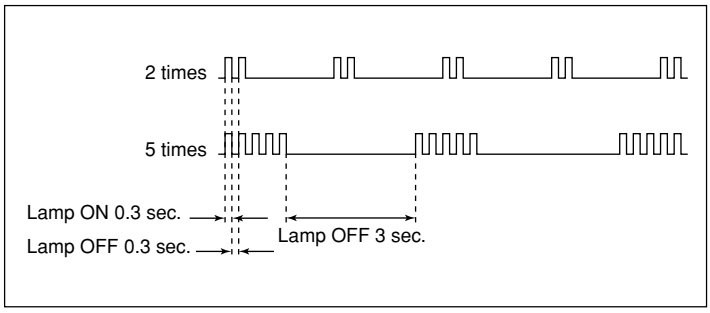
When an errors occurs, the STANDBY/TIMER lamp will flash a set number of times to indicate the possible cause of the problem. If there is more than one error, the lamp will identify the first of the problem areas.

Result for all of the following diagnostic items are displayed on screen. No error has occured if the screen displays a "0".

Diagnostic Item Description	No. of times STANDBY/TIMER lamp flashes	Self-diagnostic display/Diagnostic result	Probable Cause Location	Detected Symptoms
• Power does not turn on	Does not light	—	• Power cord is not plugged in. • Fuse is burned out F8601 (B6)	• Power does not come on. • No power is supplied to the TV. • AC power supply is faulty.
• +B overcurrent (OCP) or overvoltage (OVP) • Vertical deflection stopped • Horizontal deflection overdrive	2 times	002:000 or 002:001~255 003:001~255 004:001~255 at the same time	• H.OUT Q511 is shorted. (A board) • IC1800 is shorted. (C6 board) • -13V is not supplied. (A board) • IC 503 faulty (A board)	• Power does not come on. • Load on power line is shorted. • Has entered standby state after horizontal raster. • Vertical deflection pulse is stopped. • Power line is shorted or power supply is stopped.
• White balance failure (no PICTURE)	5 times	005:000 or 005:001~225	• G2 is improperly adjusted. (Note 2) • CRT problem. • Video OUT is faulty. (C6 board) • IC301 is faulty. (A board) • No connection A board to C6 board.	• No raster is generated. • CRT cathode current detection reference pulse output is small.
• Micro reset	—	101:00 or 101:001~225	• Discharge CRT (C6 Board) • Static discharge • External noise	• Power is shut down shortly, after this return back to normal. • Detect Micro latch up.

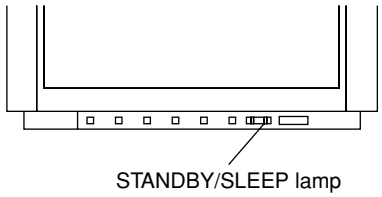
Note 1: If a + B overcurrent is detected, stoppage of the vertical deflection is detected simultaneously.
The symptom that is diagnosed first by the microcontroller is displayed on the screen.
Note 2: Refer to screen (G2) Adjustment in section 3-4 of this manual.

2. DISPLAY OF STANDBY/TIMER LIGHT FLASH COUNT



Diagnostic Item	Flash Count*
+B overcurrent/overvoltage Vertical deflection stopped	2 times
White balance failure	5 times

* One flash count is not used for self-diagnostic.



3. STOPPING THE STANDBY/TIMER FLASH

Turn off the power switch on the TV main unit or unplug the power cord from the outlet to stop the STANDBY/TIMER lamp from flashing.

4. SELF-DIAGNOSTIC SCREEN DISPLAY

For errors with symptoms such as “power sometimes shuts off” or “screen sometimes goes out” that cannot be confirmed, it is possible to bring up past occurances of failure for confirmation on the screen:

[To Bring Up Screen Test]

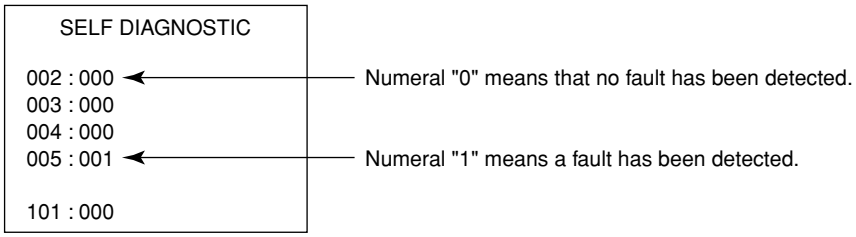
In standby mode, press buttons on the remote commander sequentially in rapid succession as shown below:

Screen display ➡ channel 5 ➡ Sound volume - ➡ Power ON

⇧

Note that this differs from entering the service mode (mode volume +).

Self-Diagnosis screen display


SELF DIAGNOSTIC
002 : 000
003 : 000
004 : 000
005 : 001
101 : 000
Numeral "0" means that no fault has been detected.
Numeral "1" means a fault has been detected.

5. HANDLING OF SELF-DIAGNOSTIC SCREEN DISPLAY

Since the diagnostic results displayed on the screen are not automatically cleared, always check the self-diagnostic screen during repairs. When you have completed the repairs, clear the result display to “0”.

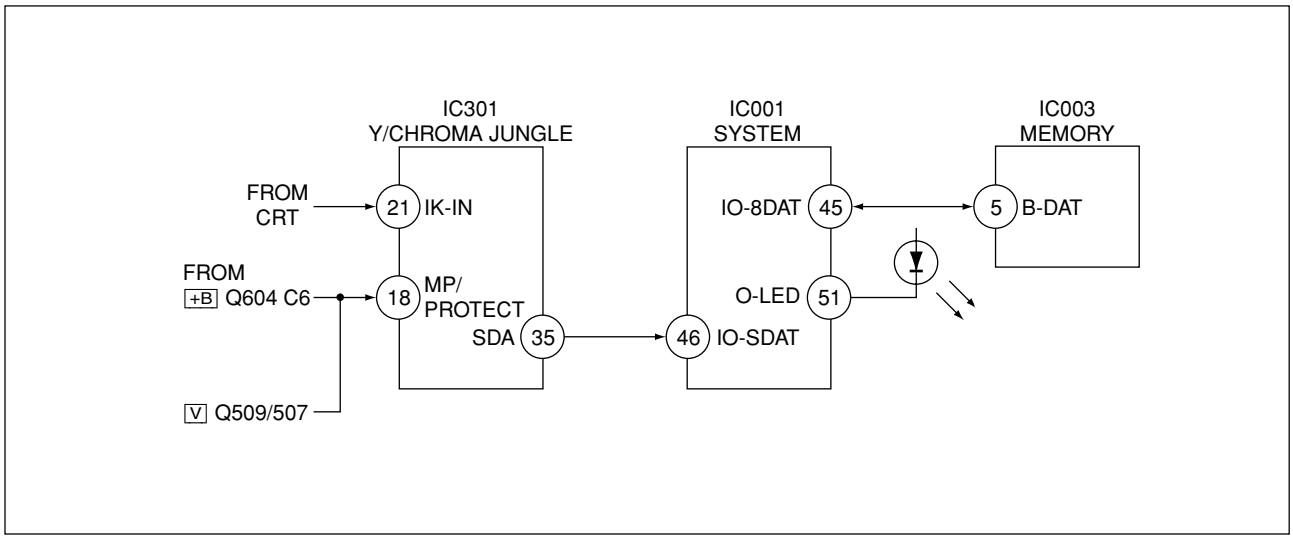
Unless the result display is cleared to “0”, the self-diagnostic function will not be able to detect subsequent faults after completion of the repairs.

[Clearing the result display]
To clear the result display to “0”, press buttons on the remote commander sequentially as shown below when the diagnostic screen is being displayed.

Channel [8] ➡ 0

[Quitting Self-diagnostic screen]
To quit the entire self-diagnostic screen, turn off the power switch on the remote commander or the main unit.

6. SELF-DIAGNOSTIC CIRCUIT

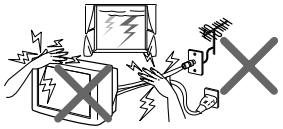


+B overcurrent (OCP)	Occurs when an overcurrent on the +B(135) line is detected by Q604. If Q604 go to ON and the voltage to pin 18 of IC301 should go down when V.SYNC is more than seven verticals in a period, the unit will automatically turn off.
Vertical deflection stopped	Occurs when an absence of the vertical deflection pulse is detected by Q509 and IC001 shut down the power supply.
Vertical deflection overcurrent	Occurs when an overcurrent on V drive line is detected by Q507. Power supply will be shut down when detect this by IC001.
White balance failure	If the RGB levels* do not balance or become low level within 5 seconds, this error will be detected by IC301. TV will stay on, but there will be no picture. * (Refers to the RGB levels of the AKB detection Ref pulse that detects IK.)

The operating instruction mentioned here are partial abstracts from the Operating Instruction Manual. The page numbers of the Operating Instruction Manual remain as in the manual.

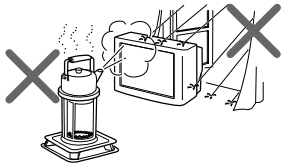
WARNING

- Dangerously high voltages are present inside the TV.
- Operate the TV only between 110 – 240 V AC.

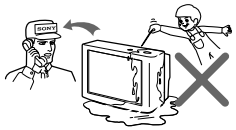


For your own safety, do not touch any part of the TV, the power cord and the antenna cable during lightning storms.

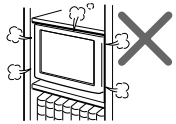
For children's safety, do not leave children alone with the TV. Do not allow children to climb onto it.



To prevent fire or shock hazard, do not expose the TV to rain or moisture.

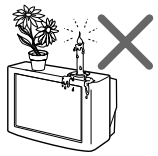


Do not operate the TV if any liquid or solid object falls into it. Have it checked immediately by qualified personnel only.

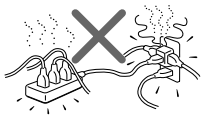


Do not block the ventilation openings of the TV. Do not install the TV in a confined space, such as a bookcase or built-in cabinet.

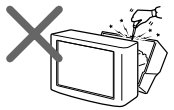
Clean the TV with a dry and soft cloth. Do not use benzine, thinner, or any other chemicals to clean the TV. Do not scratch the picture tube.



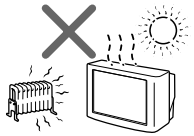
Do not place any objects on the TV.



Do not plug in too many appliances to the same power socket. Do not damage the power cord.



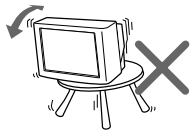
Do not open the cabinet and the rear cover of the TV as high voltages and other hazards are present inside the TV. Refer servicing and disposal of the TV to qualified personnel.



Your TV is recommended for home use only. Do not use the TV in any vehicle or where it may be subject to excessive dust, heat, moisture or vibrations.

SECTION 1
GENERAL

WARNING (continued)



Do not install the TV in an unstable position. Use a proper TV stand.

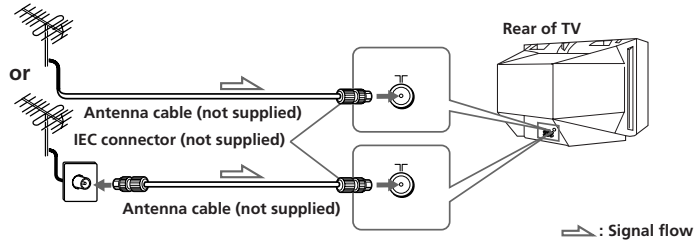
Pull the power cord out by the plug. Do not pull the power cord itself. Even if your TV is turned off, it is still connected to the AC power source (mains) as long as the power cord is plugged in. Unplug the TV before moving it or if you are not going to use it for several days.

Getting Started

Step 1

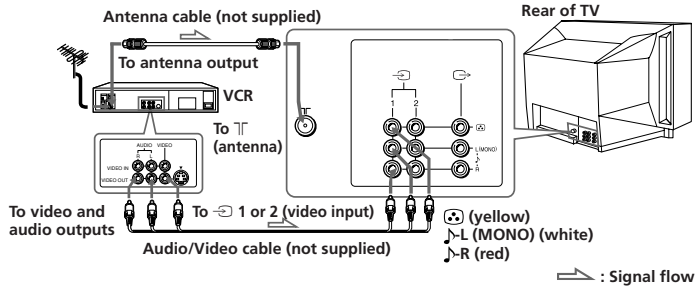
Connect the antenna

If you wish to connect a VCR, see the "Connecting a VCR" diagram below.



Connecting a VCR

To watch the video input, press ⊜ (see page 14).



Notes

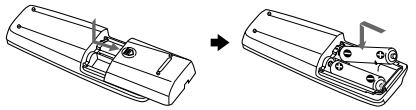
- If you connect a monaural VCR, connect the yellow plug to (the yellow jack) and the black plug to ♪-L (MONO) (the white jack).
- If you connect a VCR to the ⊤ (antenna) terminal, preset the signal output from the VCR to the program number 0 on the TV.
- When no signal is input to the connected video equipment, the TV screen becomes blue.
- Do not connect video equipment to the ⊜ 2 (video input) jacks at the front and the rear of your TV at the same time; otherwise the picture will not be displayed properly on the screen.

CAUTION

- Do not plug in the power cord until you have completed making all other connections; otherwise a minimum leakage current might flow through the antenna and other terminals to ground.
- To avoid battery leakage and damage to the remote, remove the batteries from the remote if you are not going to use it for several days. If any liquid that leaks from the batteries touches you, immediately wash it away with water.

Step 2

Insert the batteries into the remote

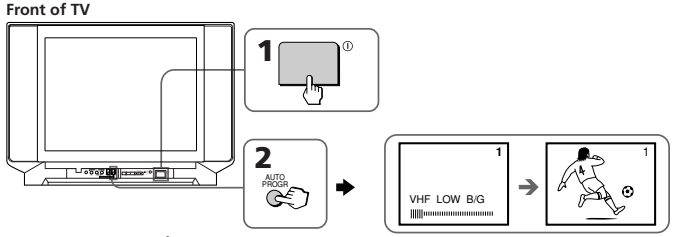


Note

- Do not use old batteries nor use different types of batteries together.

Step 3

Preset the channels automatically



Tips

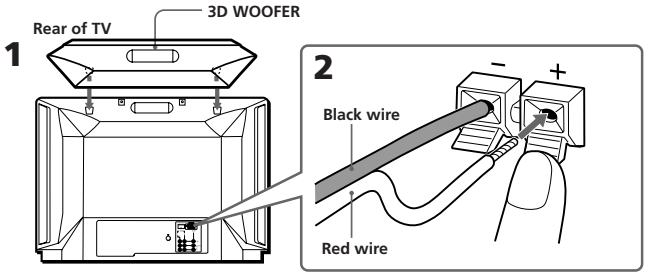
- If you want to stop automatic channel presetting, press SELECT twice.
- If your TV has preset an unwanted channel or cannot preset a particular channel, then preset your TV manually (see page 11).

Note

- During automatic channel presetting, your TV screen will indicate "B/G", "I", "D/K" or "M" for the TV system.

Connecting the 3D WOOFER

You can enjoy high quality sound by connecting the 3D WOOFER.



1 Attach the 3D WOOFER into the footholds on the top of your TV.

2 Connect the wires to the 3D WOOFER (8Ω) terminals at the rear of your TV. The red wire should be connected to the ⊕ red terminal and the black wire to the ⊖ black terminal.

Notes

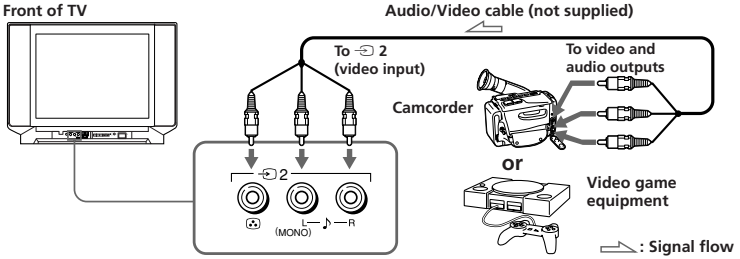
- Connect only the supplied 3D WOOFER; otherwise your TV may malfunction.
- Unplug your TV from the wall outlet when connecting the 3D WOOFER.
- To prevent a malfunction caused by a short circuit of the terminals, make sure that none of the 3D WOOFER wire strands stick out, making contact with the neighbouring speaker terminal.

Connecting optional components

You can connect optional audio/video components, such as a VCR, multi disc player, camcorder, video game or stereo system.

To watch the picture of the connected equipment, press ⊖ (see page 14).

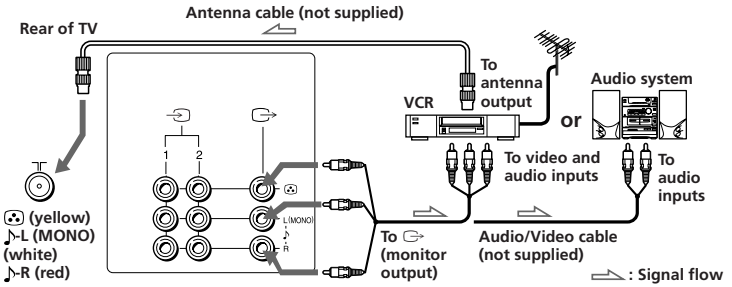
Connecting a camcorder/video game equipment using the ⊖ (video input) jacks



Notes

- You can also connect video equipment to the ⊖ 1 or 2 (video input) jacks at the rear of your TV.
- Do not connect video equipment to the ⊖ 2 (video input) jacks at the front and the rear of your TV at the same time; otherwise the picture will not be displayed properly on the screen.

Connecting audio/video equipment using the ⊕ (monitor output) jacks



continued

KV-XG29M85
RM-952

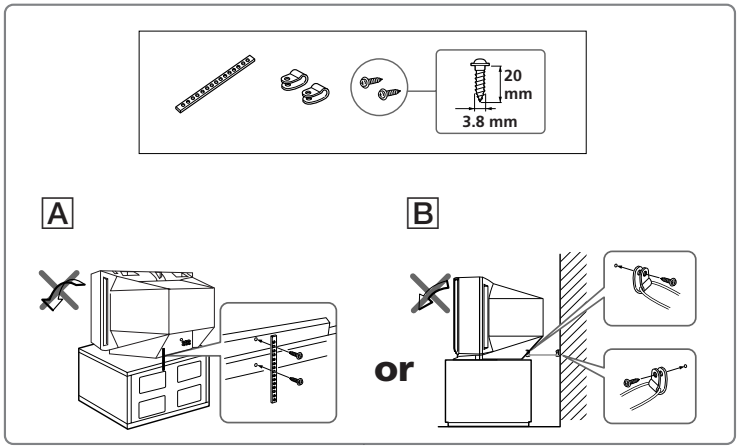
Securing the TV

To prevent the TV from falling, secure the TV using one of the following methods:

A With the supplied screws, attach the band to the TV stand and to the rear of the TV using the provided hole.

or

B Put the cord or chain through the clamps to secure the TV against a wall or pillar.

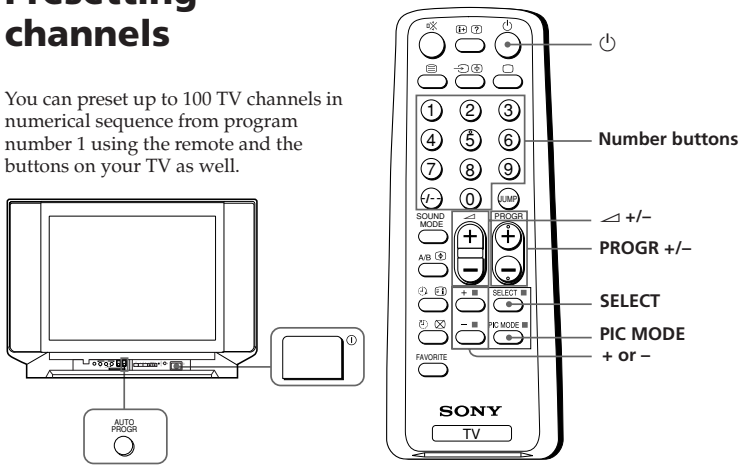


Note

- Use only the supplied screws. Use of other screws may damage the TV.

Presetting channels

You can preset up to 100 TV channels in numerical sequence from program number 1 using the remote and the buttons on your TV as well.



Presetting channels automatically

1 Press ⏻ to turn on the TV.

2 Press AUTO PROGR.

Note

- During automatic channel presetting, your TV screen will indicate "B/G", "I", "D/K" or "M" for the TV system.

To preset channels automatically from a specified program number

(1) Press SELECT until "AUTO PROGRAM" appears.

(2) Press + or –.
The on-screen display will start flashing.

(3) Press PROGR +/– or the number buttons until the desired program number appears.

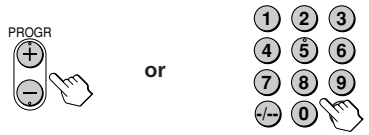
(4) Press + or –.

Presetting channels manually

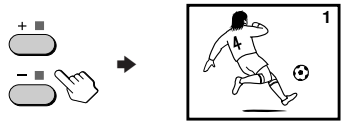
1 Press SELECT until "MANUAL PROGRAM" appears.

2 Press + or –.

3 Press PROGR +/– or the number buttons until the desired program number appears.



4 Press + or – until the desired channel picture appears.



5 Press SELECT.

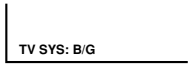
Note

- If you preset a locked channel, that particular channel will be unlocked automatically (page 19).

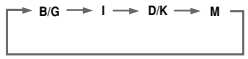
To change the TV system setting

If the picture or sound is abnormal when receiving programs through the ⅂ (antenna) terminal

(1) Press SELECT until "TV SYS" appears.



(2) Press + or – to select the appropriate TV system until the picture or sound quality is optimal.

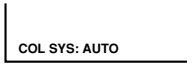


continued

To change the color system setting

If the color is abnormal when receiving programs through the ⅂ (antenna) terminal or the ⇨ (video input) jack.

(1) Press SELECT until "COL SYS" appears.



(2) Press + or – to select the appropriate color system until the color is optimal.

Tip

- Normally set "COL SYS" to "AUTO".

Skipping program numbers

1 Press PROGR +/– or the number buttons until the unused or unwanted program number appears.

2 Press SELECT until "MANUAL PROGRAM" appears.

3 Press + or –.

4 Press PIC MODE.

5 Press SELECT.

To preset the skipped program number again

Preset the channel automatically or manually.

Tip

- You can also use SELECT and ◿ +/– on the TV to preset channels and skip program numbers.

To use the fine tuning (FINE) function

The fine tuning (FINE) function may help to reduce the following problems: incomplete Teletext display double images and lines moving across the TV screen.

You can use the fine tuning function as below:

(1) Select the program number you want to adjust.
(2) Press SELECT until "MANUAL PROGRAM" appears on the screen.
(3) Press + or – on the remote control once.
(4) Press ⓘ to display "FINE" on the screen.
(5) Press + or – continuously until the above problems are minimized. The + or – icon on the screen flashes while tuning.
(6) Press SELECT to return to normal screen.

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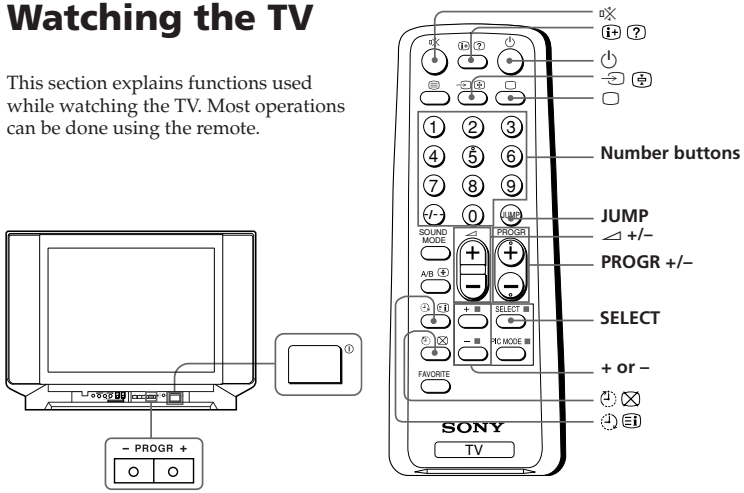
Watching the TV

This section explains functions used while watching the TV. Most operations can be done using the remote.

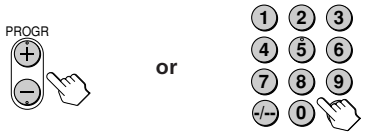


1 Press ⏻ to turn on the TV.

When the TV is in the standby mode (the ⏻ indicator on the TV is lit red), press ⏻ on the remote or PROGR +/– on the TV.

2 Press PROGR +/– or the number buttons to select the TV program.

For double digit numbers, press -/--, then the number (e.g., for 25, press -/--, then 2 and 5).



3 Press +/– to adjust the volume.

continued

Additional tasks

To	Do this
Turn off temporarily	Press ⏻. The ⏻ indicator on the TV lights up red.
Turn off completely	Press ⏻ on the TV.
Mute the sound	Press 🔇.
Watch the video input (VCR, camcorder, etc.)	Press ⏎ to select "VIDEO 1" or "VIDEO 2". To return to the TV program, press 🖵.
Jump back to the previous channel	Press JUMP.
Display the on-screen information*	Press ⓘ.
Adjust the volume of all TV programs automatically	Press SELECT repeatedly until "INTELLIGENT VOL" appears, then press + or – to select "ON". To cancel, select "OFF".
Adjust the picture position when it is not aligned to the TV screen	Press SELECT repeatedly until "PIC ROTATION" appears, then press + or – to adjust the alignment of the picture position. The ↴⊞ or ⊟↓ icon on the screen flashes while adjusting.

* The picture, sound, and either the program number or video mode are displayed. The on-screen display for the picture and sound information disappears after about three seconds.

Changing the on-screen display language

1 Press SELECT until "LANGUAGE / اللغة: ENGLISH" appears on the screen.

2 Press + or – to select "عربي".

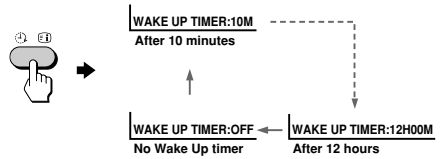
Tip

- You can also use SELECT and +/– on the TV to select the on-screen display language.

Setting the Wake Up timer

1 Press ◴ until the desired period of time appears.

The Wake Up timer starts immediately after you have set it.



2 Select the TV program or video mode you want to display when you wake up.

3 Press ⏻ or set the Sleep timer if you want the TV to turn off automatically.

The ◴ indicator on the TV lights up orange when the TV goes into standby mode.

To cancel the Wake Up timer

Press ◴ until "WAKE UP TIMER: OFF" appears or turn off the TV's main power.

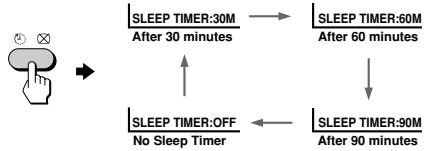
Note

- If no buttons or controls are pressed for more than two hours after the TV is turned on using the Wake Up timer, the TV automatically goes into the standby mode. To continue watching the TV, press any button or control on the TV or the remote.

Setting the Sleep timer

Press ◴ until the desired period of time appears.

The Sleep timer starts immediately after you have set it.



To cancel the Sleep timer

Press ◴ until "SLEEP TIMER: OFF" appears or turn the TV off.

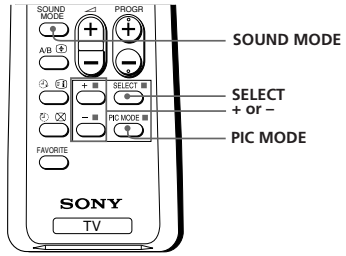
Using Your New TV

Advanced Operations

Customizing the picture and sound

You can customize the picture and sound by selecting the picture and sound modes or by adjusting its settings.

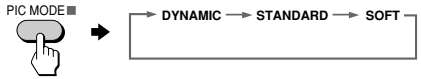
You can change the sound effect by selecting the surround mode.



Selecting the picture and sound modes

To select the picture mode

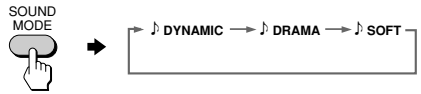
Press PIC MODE repeatedly until you get the desired picture mode.



Select	To
"DYNAMIC"	view high contrast pictures.
"STANDARD"	view normal contrast pictures.
"SOFT"	view mild pictures.

To select the sound mode

Press SOUND MODE repeatedly until you get the desired sound mode.



Select	To
"DYNAMIC"	listen to dynamic and clear sound that emphasizes the low and high sound.
"DRAMA"	listen to sound that emphasizes vocals and background music.
"SOFT"	listen to soft sound.

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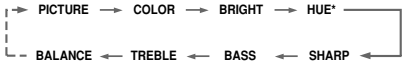
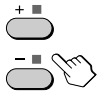
Adjusting the picture and sound settings

1 Press SELECT until the desired setting appears.

Each time you press SELECT, the setting item will change as follows:



2 Press + or – to adjust the item.



3 To adjust other items, repeat steps 1 to 2.

* "HUE" can be adjusted for the NTSC system only.

Notes

- When you select a picture or sound mode, the adjusted settings will be reset according to the selected mode.
- You can also use SELECT and +/– on the TV to adjust the picture and sound settings.

Selecting the surround mode

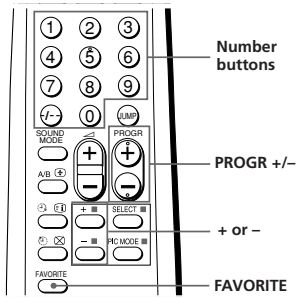
1 Press SELECT repeatedly until "SURROUND" appears.

2 Press + or – to select the desired surround sound.

Select	To
"MOVIE"	listen to sound that spreads out over a large area, giving the feeling of being at a movie theatre.
"MUSIC"	listen to the sound that gives the feeling of being at a live concert.
"OFF"	turn off the surround sound.

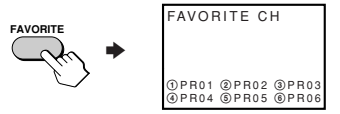
Viewing your favorite channels

You can display six of your favorite channels for quick and easy selection. You can change the favorite channel setting as well.

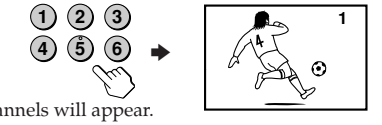


Selecting a favorite channel

1 Press FAVORITE.



2 Press the number button from 1 to 6 to select the desired channel.



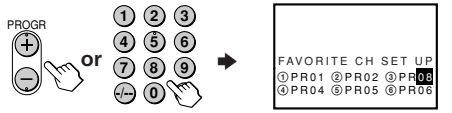
When you use the "FAVORITE CH" feature for the first time, six preset channels will appear.

Changing the favorite channel setting

1 Press SELECT until "FAVORITE CH SET UP" appears.

2 Press + or – to select the favorite channel you want to change (e.g. ③ PR03).

3 Press PROGR +/–, or number buttons to change the program number.

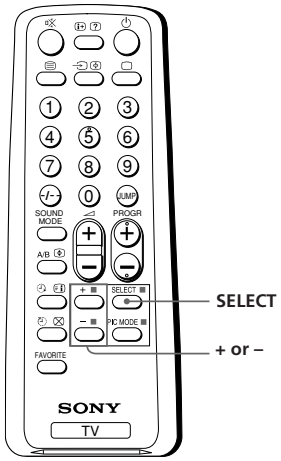


4 Repeat steps 2 and 3 to set other favorite channels.

5 Press SELECT.

Blocking the channels (CHILD LOCK)

You can prevent a child from watching certain channels by using the buttons on the remote control.



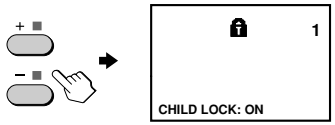
1 Select the channel you want to lock.

2 Press SELECT until "CHILD LOCK" appears on the screen.

3 Press + or – to select "ON".

The 🔒 symbol appears on the screen.

To unlock the channel, press + or – to select "OFF". The 🔒 symbol disappears from the screen.

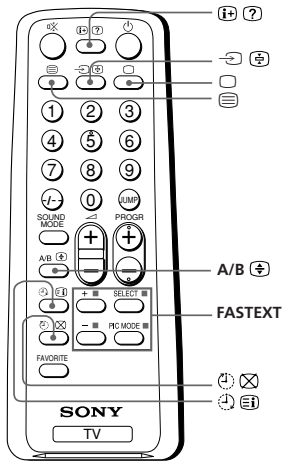


Note

- If you preset a locked channel, that particular channel will be unlocked automatically (page 10).

Viewing Teletext

TV stations broadcast an information service called Teletext via some TV channels. Teletext allows you to receive various information, such as shares market or news.

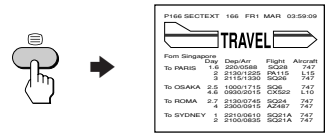


Displaying Teletext

1 Select a TV channel that carries the Teletext broadcast you want to watch.

2 Press ▤ to display the text.

A Teletext page (normally the index page) is displayed. If there is no Teletext broadcast, "100" is displayed at the top left corner of the screen.



To turn off Teletext

Press ▢.

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Additional Teletext tasks

To	Do this
display a Teletext page on the TV picture	Press ☰. Each time you press ☰, the screen changes as follows: Teletext → Teletext and TV → TV.
check the contents of a Teletext service	Press ☰i. An overview of the Teletext contents and page numbers appear on the screen.
select a Teletext page	Press the number buttons to enter the three-digit page number of the desired Teletext page. * If you make a mistake, reenter the correct page number. To access the next or previous page, press PROGR +/–.
hold a Teletext page (stop the page from scrolling)	Press ⊜ to display the symbol "⊜" at the top left corner of the screen. To resume normal Teletext operation, press ⊜ or ☰.
reveal concealed information (e.g., an answer to a quiz)	Press ?. To conceal the information, press the button again.
enlarge the Teletext display	Press ⊕. Each time you press ⊕, the Teletext display changes as follows: Enlarge upper half → Enlarge lower half → Normal size.
wait for a Teletext page while watching a TV program	1 Enter the Teletext page number that you want to refer to, then press ⊗. 2 When the page number is displayed, press ☰ to show the text.

* You can also select a Teletext page of any page number that appears in the colored column at the bottom of the screen using the corresponding color-coded button on the remote.

Using FASTEXT

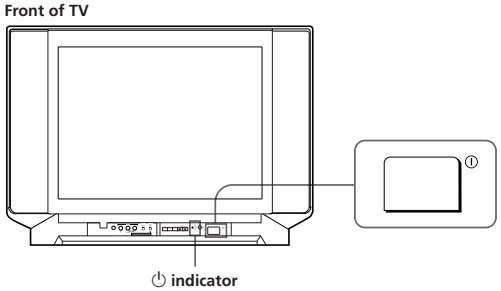
This feature allows you to quickly access a Teletext page that uses FASTEXT. When a FASTEXT program is broadcasted, the colored menus appear at the bottom of the screen. The colors of the menus correspond to the red, green, yellow, and blue color-coded buttons on the remote.

To access a FASTEXT menu

Press the color-coded button on the remote corresponding to the menu you want. The menu page appears on the screen after several seconds.

Self-diagnosis function

Your TV is equipped with a self-diagnosis function. If there is a problem with your TV, the ⏻ indicator flashes red. The number of times the ⏻ indicator flashes indicates the possible causes.



1 Check that the ⏻ indicator flashes red several times between three-second intervals.

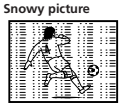
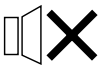
2 Count the number of times the ⏻ indicator flashes.

3 Press ⏻ (main power) to turn off your TV.

4 Inform your nearest Sony service center about the number of times the ⏻ indicator flashes.
Be sure to note the model name and serial number located on the rear of your TV.

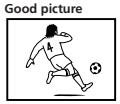
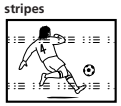
Troubleshooting

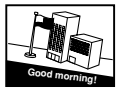
If you find any problem while viewing your TV, please check the following guide. If any problem persists, contact your Sony dealer.

Symptom	Possible cause	Solutions	Page
Snowy picture  Noisy sound	• Connection is loose or the cable is damaged.	• Check the antenna cable and connection on the TV, VCR and on the wall.	4
	• Channel presetting is inappropriate or incomplete.	• Press SELECT until "MANUAL PROGRAM" appears on the screen, then preset the channel again.	11
	• The antenna type is inappropriate.	• Check the antenna type (VHF/UHF). Contact a Sony dealer for advice.	–
	• The antenna direction is inappropriate.	• Adjust the antenna direction. Contact a Sony dealer for advice.	–
	• Signal transmission is low.	• Try using a booster.	–
Distorted picture Noisy sound	• Broadcast signals are too strong.	• Turn off or disconnect the booster if it is in use.	–
Good picture Noisy sound	• The TV system setting is inappropriate.	• If the sound of some channels are noisy, select the channel, then select the appropriate TV system ("TV SYS").	11
No picture No sound 	• The power cord, antenna or VCR is not connected.	• Check the power cord, antenna and the VCR connections.	4
	• The TV is not turned on.	• Press ⏻ (power). • Press ⏻ (main power) on the TV to turn off the TV for about five seconds, then turn it on again.	14 13

continued

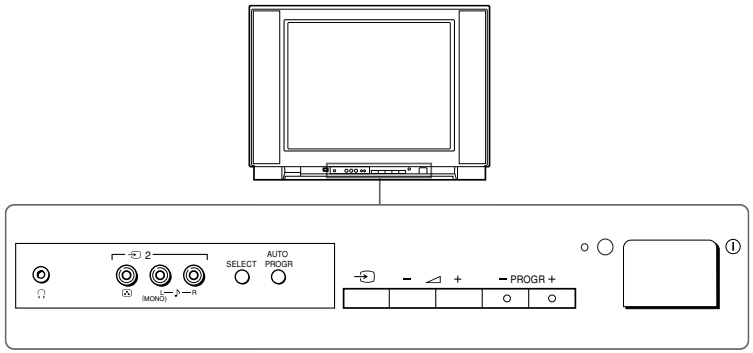
Troubleshooting (continued)

Symptom	Possible cause	Solutions	Page
Good picture  No sound	• The volume level is too low.	• Press + to increase the volume level.	13
	• The sound is muted.	• Press 🔇 to cancel the muting.	14
Dotted lines or stripes 	• There is local interference from cars, neon signs, hair dryers, power generators, etc.	• Do not use a hair dryer or other equipment near the TV. • Adjust the antenna direction for minimum interference. Contact a Sony dealer for advice.	– –
Double images or "ghosts"	• Broadcast signals are reflected by nearby mountains or buildings.	• Use a highly directional antenna. • Use the fine tuning (FINE) function.	– 12
	• The antenna direction is inappropriate.	• Adjust the antenna direction. Contact a Sony dealer for advice.	–
	• Use of a booster is inappropriate.	• Turn off or disconnect the booster if it is in use.	–
No color	• The color level setting is too low.	• Press SELECT until "COLOR" appears on the screen, then press + or – to adjust the color level.	17
	• The color system setting is inappropriate.	• Press SELECT until "COL SYS" appears on the screen, then check the color system setting (usually set this to "AUTO").	12
	• The antenna direction is inappropriate.	• Adjust the antenna direction. Contact a Sony dealer for advice.	–
Abnormal color patches	• The magnetic disturbance from external speakers or other equipment, or the direction of the earth's magnetic field may affect the TV.	• Keep external speakers or other electrical equipment away from the TV. Do not move the TV while the TV is turned on. Press ⏻ (main power) on the TV to turn off the TV for about 15 minutes, then turn it on again.	–

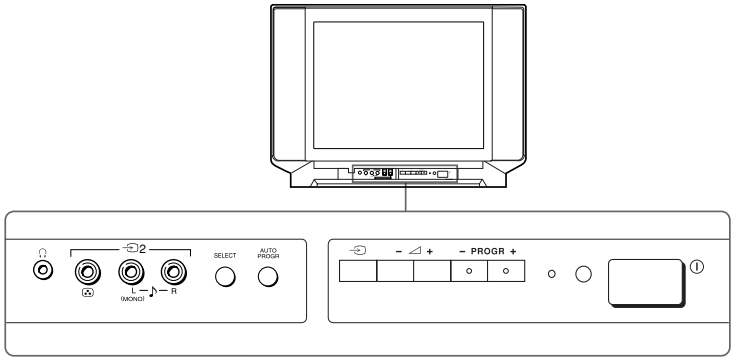
Symptom	Possible cause	Solutions	Page
"100" appears on the top of the screen and there is no Teletext display.	• The channel carries no Teletext broadcast.	—	20
Teletext display is incomplete (snowy picture or double images).	• Connection is loose or the cable is damaged.	• Check the antenna cable and connection on the TV, VCR, and at the wall.	4
	• The antenna direction is inappropriate.	• Adjust the antenna direction. Contact a Sony dealer for advice.	–
	• Signal transmission is too low.	• Try using a booster. • Use the fine tuning (FINE) function.	– 12
Picture slant 	• The magnetic disturbance from external speakers or other equipment, or the direction of the earth's magnetic field may affect the TV.	• Keep external speakers or other electrical equipment away from the TV. • Press SELECT until "PIC ROTATION" appears on the screen, then press + or – to adjust the picture position until it is optimal.	– 14
Lines moving across the TV screen.	• There is interference from external sources, e.g.,heavy machineries, nearby broadcast station.	• Use the fine tuning (FINE) function.	12
The ⏻ indicator on your TV flashes red several times between three-second intervals.	• Your TV may need service.	• Contact your nearest Sony service center.	22
TV cabinet creaks.	• Changes in room temperature sometimes make the TV cabinet expand or contract, making a noise. This does not indicate a malfunction.	—	—
A "boom" sound is heard when the TV is turned on.	• The TV's demagnetizing function is working. This does not indicate a malfunction.	—	—

Overview of controls

TV front panel



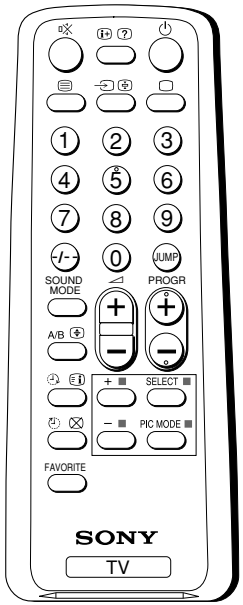
Button	Function	Page
AUTO PROGR	Preset channels automatically.	5
SELECT	Select the desired item.	11
PROGR +/–	Select program number.	13
⏻	Turn off completely or turn on the TV.	13
+/–	Adjust volume.	13
⏎	Select TV or video input.	14
🎧	Headphone jack.	–



Button	Function	Page
AUTO PROGR	Preset channels automatically.	5
SELECT	Select the desired item.	11
PROGR +/–	Select program number.	13
⏻	Turn off completely or turn on the TV.	13
◿ +/–	Adjust volume.	13
⏎	Select TV or video input.	14
🎧	Headphone jack.	–

continued

Remote Control



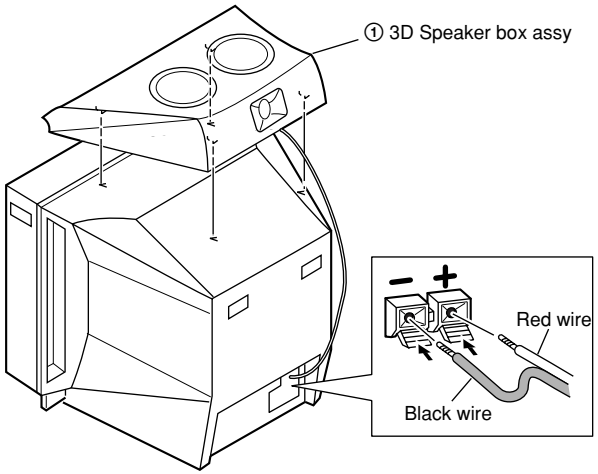
The names/symbols of buttons on the remote are indicated in different colors to represent the available functions.

Label color	Button function
White	For general TV operations
Green	For Teletext operations

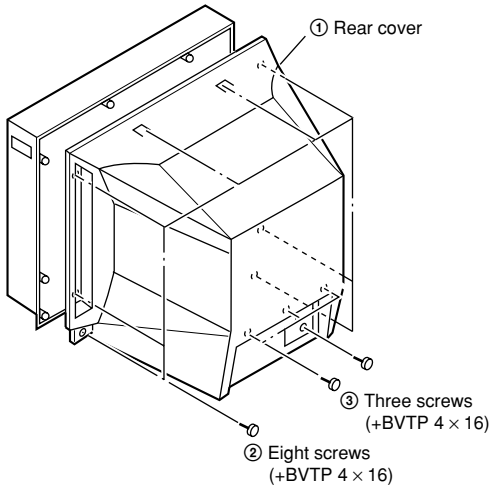
Button	Function	Page
SELECT	Select the desired item.	11
+/–	Adjust value.	11
PROGR +/–	Select program number.	13
0 – 9, -/--	Input numbers.	13
◿ +/–	Adjust volume.	13
⏻	Turn off temporarily or turn on the TV.	14
⏎	Select TV or video input.	14
▢	Display the TV program.	14
🔇	Mute the sound.	14
ⓘ	Display on-screen information.	14
JUMP	Jump to previous channel.	14
Timer operations		
🕘	Set TV to turn on automatically.	15
🕘	Set TV to turn off automatically.	15
PIC MODE	Select picture mode.	16
SOUND MODE	Select sound mode.	16
FAVORITE	Display favorite channels.	18
Stereo/bilingual operations (Not used for these model)		
A/B	Select stereo/bilingual mode.	–
Teletext operations		
☰	Display Teletext broadcast.	20
⇕	Enlarge the Teletext display.	21
?	Reveal concealed information.	21
⊜	Stop Teletext display from scrolling.	21
☰i	Display Teletext service contents.	21
⊠	Show TV screen while waiting for Teletext page.	21
■ (red, green, yellow, blue)	Access a FASTEXT menu.	21

SECTION 2
DISASSEMBLY

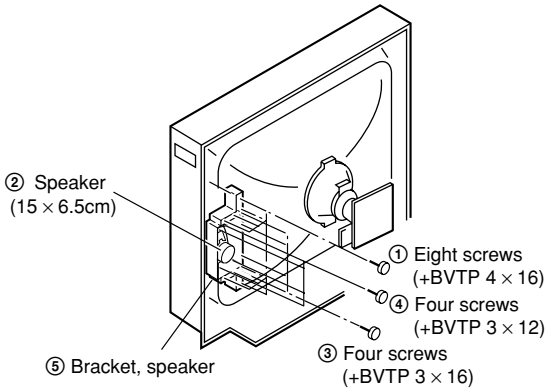
2-1. 3D SPEAKER BOX REMOVAL



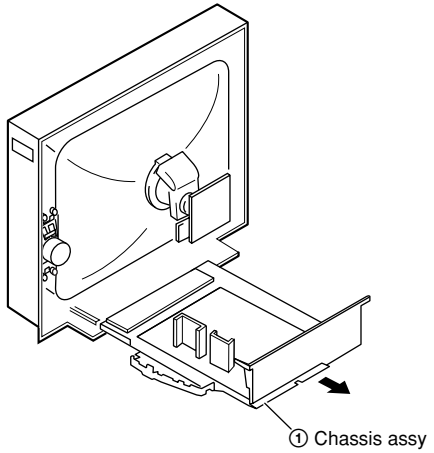
2-2. REAR COVER REMOVAL



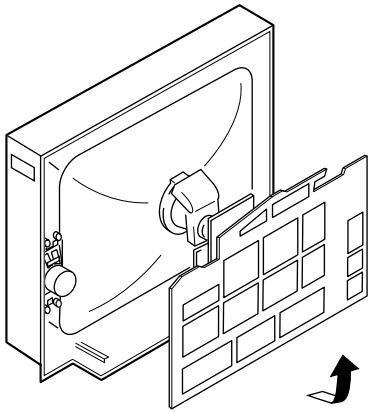
2-3. SPEAKER REMOVAL



2-4. CHASSIS ASSY REMOVAL



2-5. SERVICE POSITION



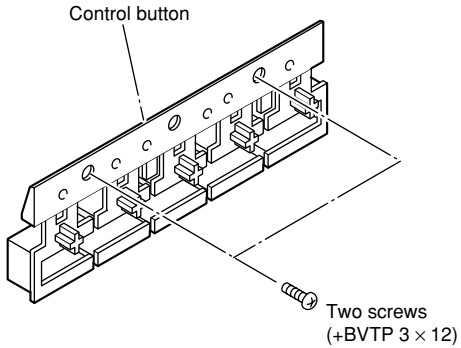
Note:

Undress necessary wires that creates tension while placing the chassis into Service Position.

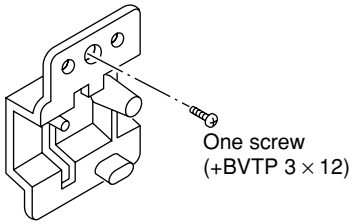
2-6. REPLACEMENT OF PARTS

For replacement of the Control Button and Light Guide, unscrew them, exchange with the new parts, and fix them with screws (+BVTP) respectively.

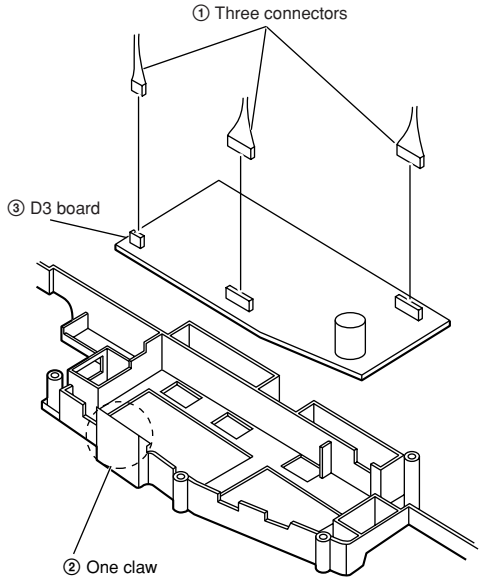
2-6-1. REPLACEMENT OF CONTROL BUTTON



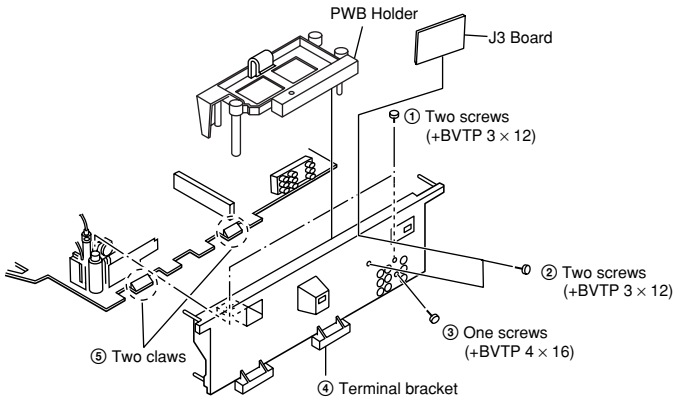
2-6-2. REPLACEMENT OF LIGHT GUIDE



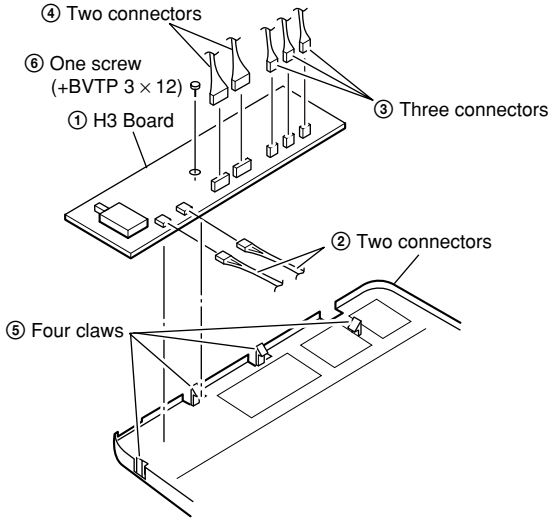
2-7. D3 BOARD REMOVAL



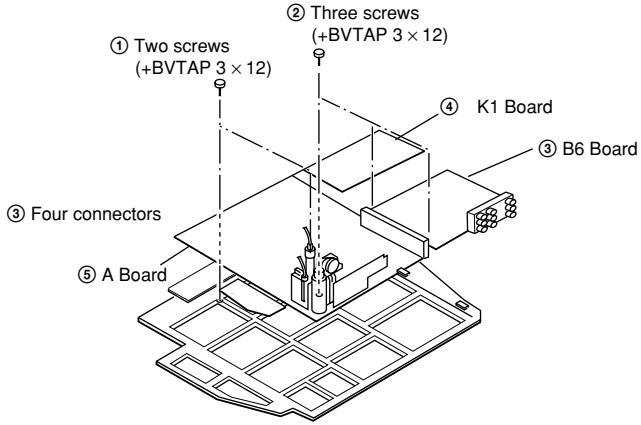
2-8. J3 BOARD, PWB HOLDER AND TERMINAL BRACKET REMOVAL



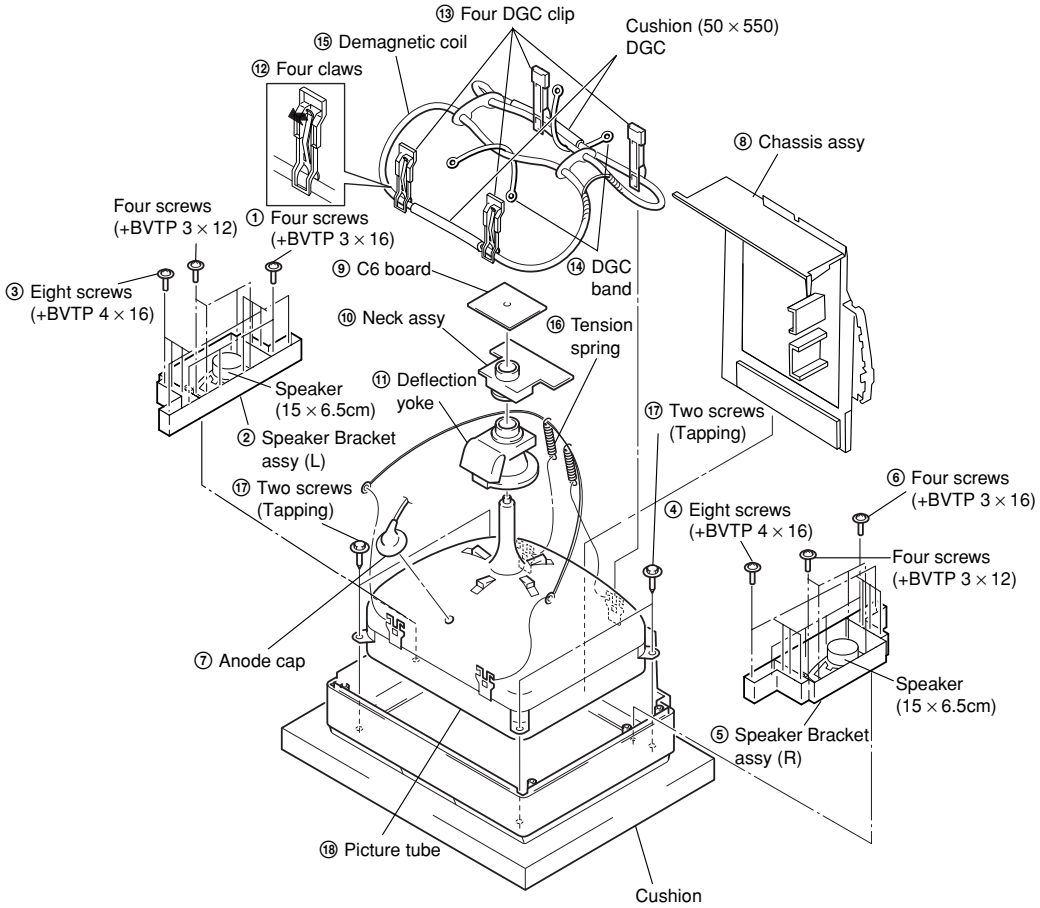
2-9. H3 BOARD REMOVAL



2-10. A, B6 AND K1 BOARDS REMOVAL



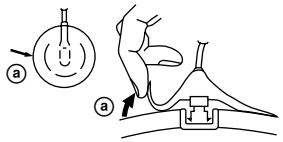
2-11. PICTURE TUBE REMOVAL



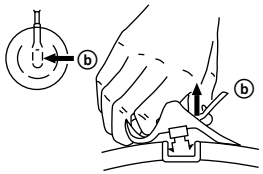
• REMOVAL OF ANODE-CAP

NOTE : After removing the anode, short circuit the anode of the picture tube and the anode cap to the metal chassis, CRT shield or carbon paint on the CRT.

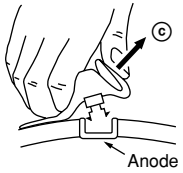
• REMOVING PROCEDURES



① Turn up one side of the rubber cap in the direction indicated by the arrow ⓐ.



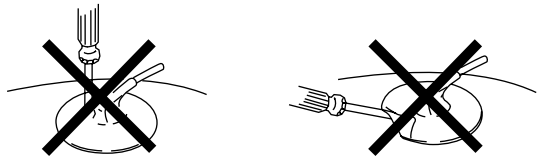
② Using a thumb pull up the rubber cap firmly in the direction indicated by the arrow ⓑ.



③ When one side of the rubber cap is separated from the anode button, the anode-cap can be removed by turning up the rubber cap and pulling it up in the direction of the arrow ⓒ.

• HOW TO HANDLE AN ANODE-CAP

① Do not damage the surface of anode-caps with sharp shaped objects.
② Do not press the rubber too hard so as not to damage the inside of anode-cap. A metal fitting called the shatter-hook terminal is built into the rubber.
③ Do not turn the foot of rubber over too hard. The shatter-hook terminal will stick out or damage the rubber.



SECTION 3
SET-UP ADJUSTMENTS

- The following adjustments should be made when a complete realignment is required or a new picture tube is installed.
- These adjustments should be performed with rated power supply voltage unless otherwise noted.

Controls and switches should be set as follows unless otherwise noted:

PICTURE control ..... normal
BRIGHTNESS control ..... normal

Perform the adjustments in the following order :

1. Beam Landing
2. Convergence
3. Focus
4. White Balance

Note : Test Equipment Required.

1. Color-bar/Pattern Generator
2. Degausser
3. Oscilloscope

Preparation :

- In order to reduce the influence of geomagnetism on the set's picture tube, face it east or west.
- Switch on the set's power and degauss with the degausser.

3-1. BEAM LANDING

1. Input a white signal with the pattern generator.
   Contrast } normal
   Brightness }
2. Position neck assy as shown in Fig3-2.
3. Set the pattern generator raster signal to a green raster.
4. Move the deflection yoke to the rear and adjust with the purity control so that the green is at the center and the blue and the red take up equally sized areas on each side.
   (See Figures 3-1 through 3-4.)
5. Move the deflection yoke forward and adjust so that the entire screen is green. (See Figure 3-2.)
6. Switch the raster signal to blue, then to red and verify the condition.
7. When the position of the deflection yoke has been decided, fasten the deflection yoke with the screws and DY spacers.
8. If the beam does not land correctly in all the corners, use a magnet to adjust it.
   (See Figure 3-5.)

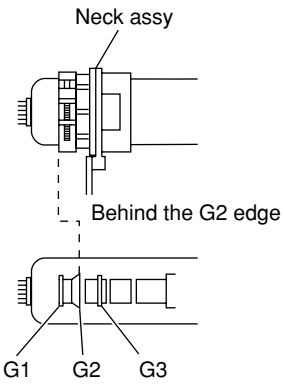


Fig. 3-1

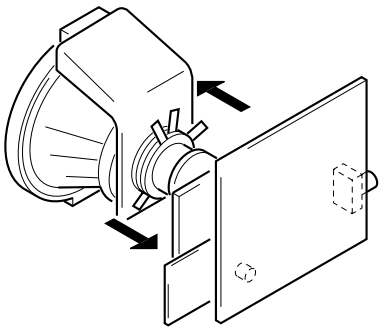


Fig. 3-2

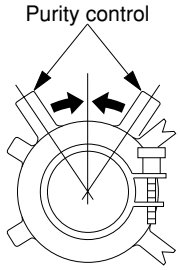


Fig. 3-3

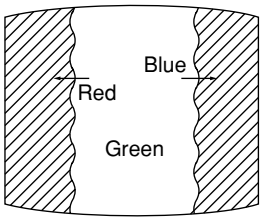


Fig. 3-4

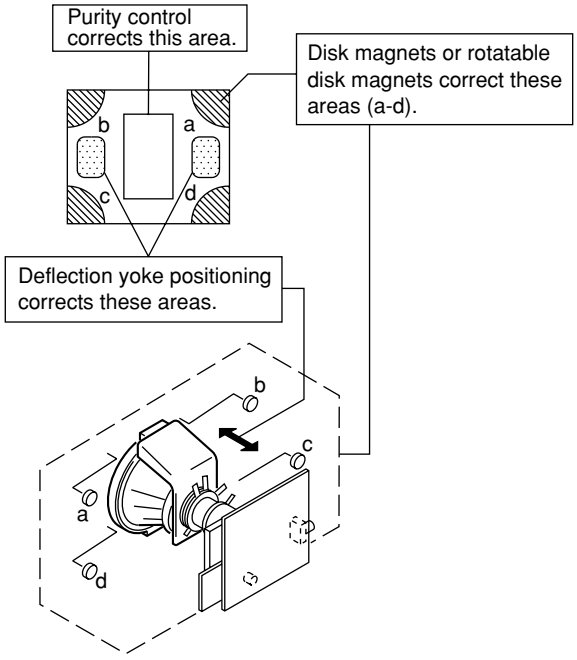


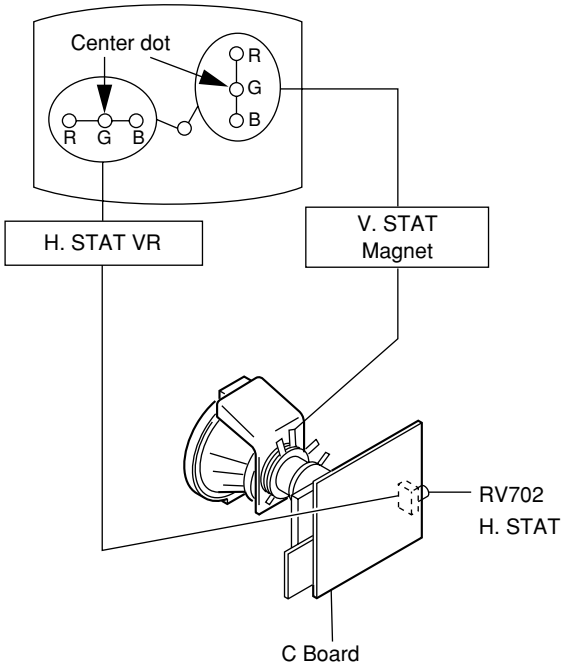
Fig. 3-5

3-2. CONVERGENCE

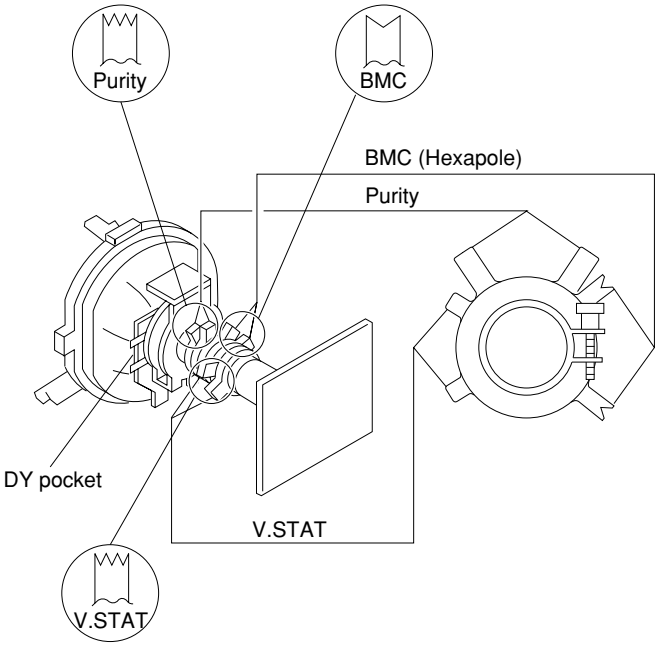
Preparation :

- Before starting this adjustment, adjust the focus, horizontal size and vertical size.
- Minimize the brightness setting.
- Provide dot pattern.

(1) Horizontal and Vertical Static Convergence

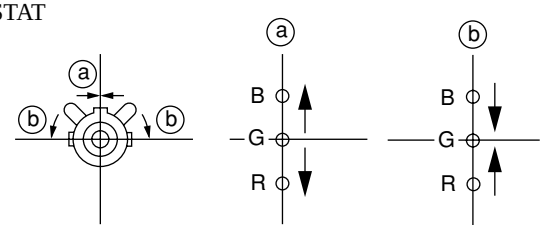


1. (Moving horizontally), adjust the H.STAT control so that the red, green and blue dots are on top of each other at the center of the screen.
2. (Moving vertically), adjust the V.STAT magnet so that the red, green and blue dots are on top of each other at the center of the screen.
3. If the H.STAT variable resistor cannot bring the red, green and blue dots together at the center of the screen, adjust the horizontal convergence with the H.STAT variable resistor and the V.STAT magnet in the manner given below.
   (In this case, the H.STAT variable resistor and the V.STAT magnet influence each other, so be sure to perform adjustments while tracking.)

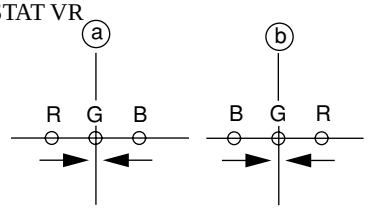


Operation V.Stat

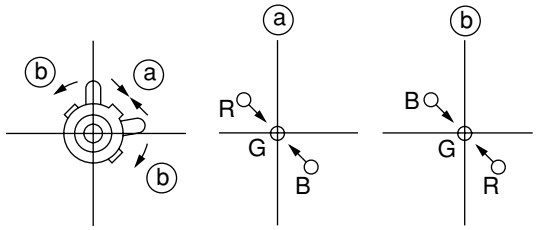
① V. STAT



② H. STAT VR

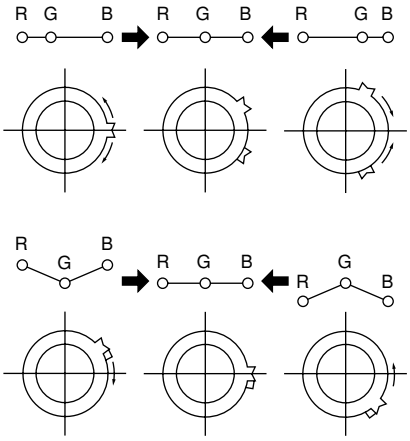


③



④ BMC (Hexapole) Magnet.

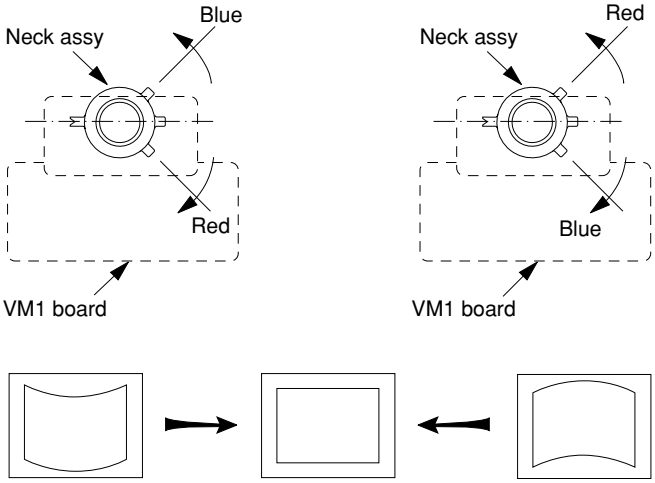
If the red, green and blue dots are not balanced or aligned, then use the BMC magnet to adjust in the manner described below.



⑤ Y separation axis correction magnet adjustment.

1. Receive the cross-hatch signal and adjust [PICTURE] to [MIN] and [BRIGHTNESS] to [STANDARD] .

2. Adjust the Y separation axis correction magnet on the neck assembly so that the horizontal lines at the top and bottom of the screen are straight.



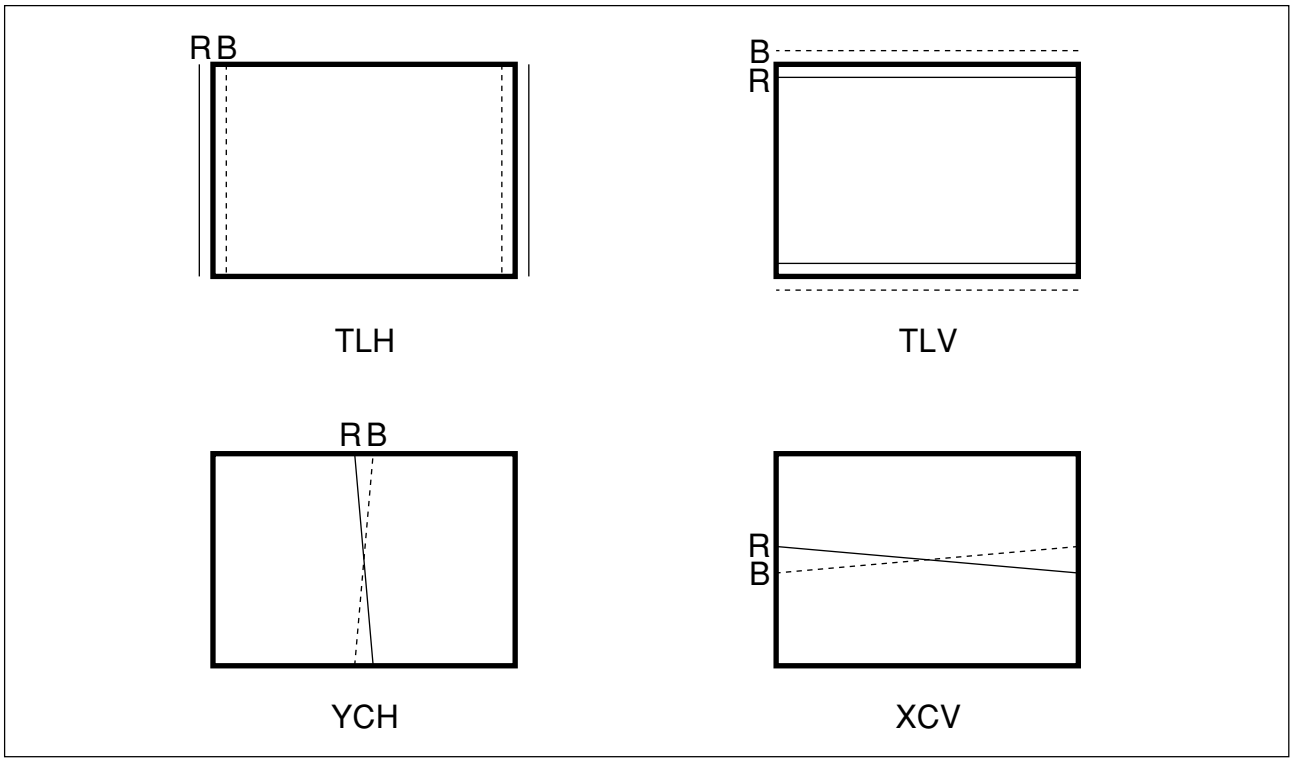
Note

1. The Red and Blue magnets should be equally far from the horizontal center line.
2. Do not separate the Red and Blue magnets too far. (Less than 8 mm)

(2) Dynamic Convergence Adjustment

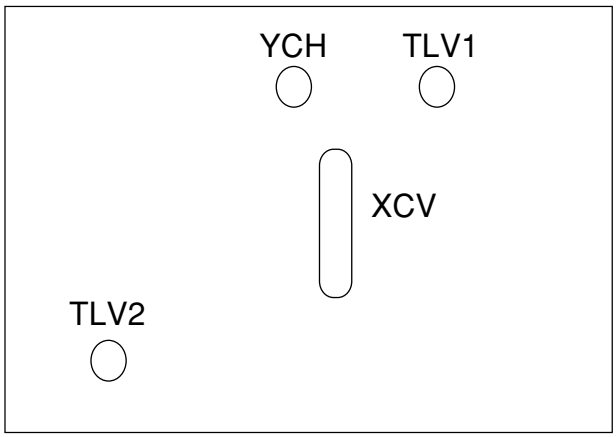
Preparation:

- Before starting this adjustment, adjust the horizontal static convergence and the vertical static convergence

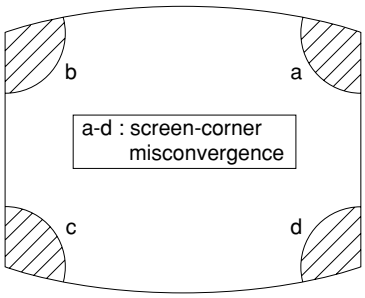


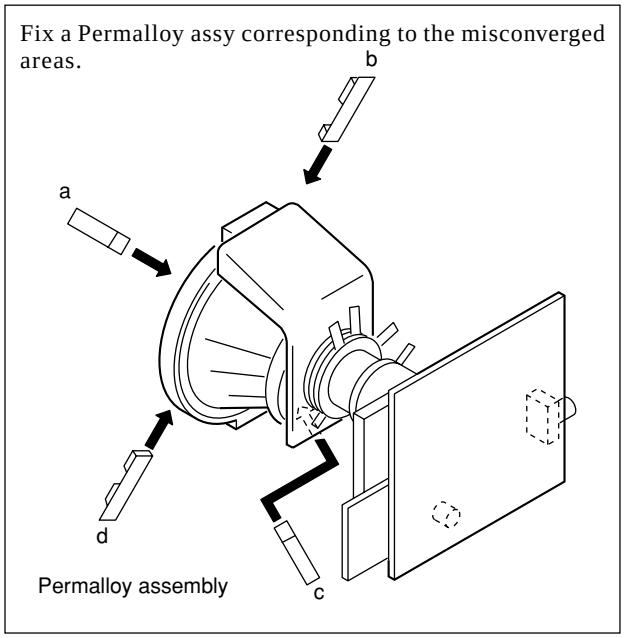
TLV	Rotate	TLV-2	VOL on DY
XCV	Rotate	XCV	Adj core on DY
YCH	Rotate	YCH	VOL on DY
TLH	Insert	TLH	Correction Plate to DY Pocket (Left or Right)

ON DY:



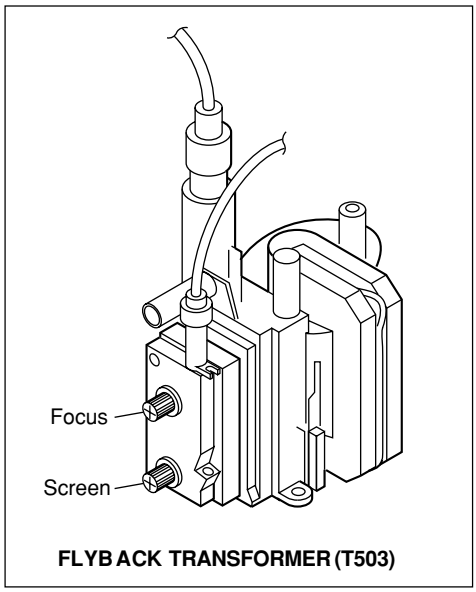
(3) Screen-corner Convergence





3-3. FOCUS ADJUSTMENT

Adjust FOCUS control on the flyback transformer for the best focus.



FLYBACK TRANSFORMER (T503)

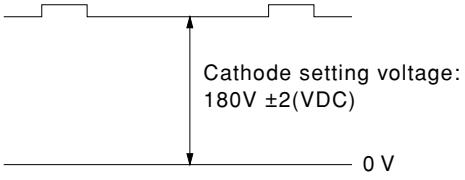
FOCUS ADJUSTMENT

1) Receive digital monoscope pattern.
2) Set "AV CONTROL" to "DYNAMIC"
3) Adjust FOCUS VR so that center of the screen becomes just focus
4) Change the receiving signal to white pattern and blue back.
5) Confirm MAGENTA RING is not noticeable,
   Incase magenta is very obvious, adjust a FOCUS VR to take balance between MAGENTA RING and FOCUS.

3-4. G2 (SCREEN) AND WHITE BALANCE ADJUSTMENTS

1. G2 (SCREEN) ADJUSTMENT

1) Set the PICTURE to normal.
2) Put to VIDEO input mode without signals.
3) Connect R, G and B of the C6 board cathode to the oscilloscope.
4) Adjust BRIGHTNESS to obtain the cathode voltage to the value below.
5) Adjust G2 (screen) on the FBT until picture shows the point before cut off.

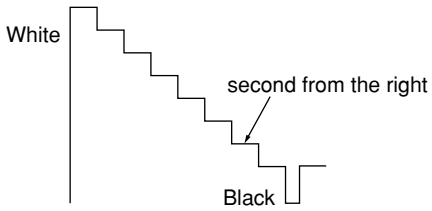


2. WHITE BALANCE ADJUSTMENT

1) Set to Service Mode (Refer Section 4-1: ADJUSTMENTS WITH COMMANDER).
2) Input white raster signal.
3) Set the PICTURE to minimum.
4) Select GCT (WHB 4) and BCT (WHB 5) with [1] and [4], and adjust the level with [3] and [6] for the best white balance.
5) Set the PICTURE to maximum.
6) Select GDR (WHB 1) and BDR (WHB 2) with [1] and [4], and adjust the level with [3] and [6] for the best white balance.
7) Write into the memory by pressing [MUTING] then [0].

3. SUB BRIGHT ADJUSTMENT

1) Set to service mode.
2) Input a staircase signal of black to white from the pattern generator.
3) BRIGHTNESS .... 50%.
   PICTURE ..... MINIMUM
4) Select SBR (WHB7) with [1] and [4], and adjust SBR (WHB7) level with [3] and [6] so that the second stripe from the right is dimly lit.



SECTION 4
CIRCUIT ADJUSTMENTS

4-1. ADJUSTMENTS WITH COMMANDER

Service adjustments to this model can be performed using the supplied Remote Commander RM-952.

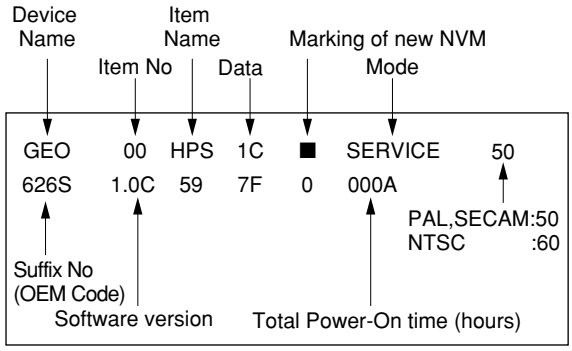
a. ENTERING SERVICE MODE

With the unit on standby

→ [DISPLAY] → [5] → [VOL (+)] → [POWER]

This operation sequence puts the unit into service mode.

The screen display is :



b. METHOD OF CANCELLATION FROM SERVICE MODE

Set the standby condition (Press [POWER] button on the commander), then press [POWER] button again, hereupon it becomes TV mode.

c. METHOD OF WRITE INTO MEMORY

1) Set to Service Mode.
2) Press [1] (UP) and [4] (DOWN), to select the adjustment.
4) Press [MUTING] button to indicate WRITE on the screen.
5) Press [0] button to write into memory.

d. MEMORY WRITE CONFIRMATION METHOD

1) After adjustment, pull out the plug from AC outlet, and then plug into AC outlet again.
2) Turn the power switch ON and set to Service Mode.
3) Call the adjusted items again to confirm adjustments were made.

[1], [4]	Select the adjustment item.
↓	
[3], [6]	Raise/lower the data value.
↓	
[MUTING]	Writes.
↓	
[0]	Executes the writing.

[7], [0]	All the data becomes the values in memory.
[8], [0]	All user control goes to the standard state.
[5], [0]	Service data initialization (Be sure not to use usually.)
[2], [0]	Copy and write all data.
[MUTE], [0]	Write 50Hz adjustment data to 60Hz, or vice versa.

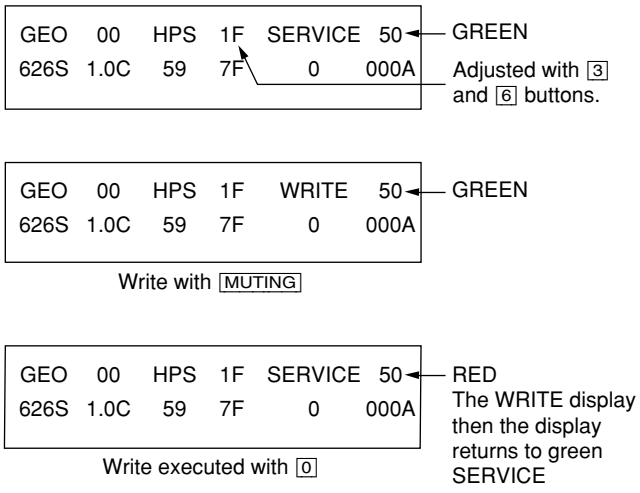
4-2. ADJUSTMENT METHOD

Item Number 00 of device GEO

This explanation uses H-Position as an example.

1. Select "GEO 00 HPS" with the [1] and [4] buttons.
2. Raise/lower the data with the [3] and [6] buttons.
3. Select the optimum state. (The standard is 1F for PAL reception.)
4. Write with the [MUTING] button. (The display changes to WRITE.)
5. Execute the writing with the [0] button. (The WRITE display will be changed to red color while excuting, and back to SERVICE.)

Example on screen display :-


GEO 00 HPS 1F SERVICE 50
626S 1.0C 59 7F 0 000A
GREEN
Adjusted with [3] and [6] buttons.
GEO 00 HPS 1F WRITE 50
626S 1.0C 59 7F 0 000A
GREEN
Write with [MUTING]
GEO 00 HPS 1F SERVICE 50
626S 1.0C 59 7F 0 000A
RED
The WRITE display then the display returns to green SERVICE
Write executed with [0]

Use the same method for all Items. Use [1] and [4] to select the adjustment item, use [3] and [6] to adjust, write with [MUTING], then execute the write with [0].

Note : 1. In [WRITE], the data for all items are written into memory together.
2. For adjustment items that have different standard data between 50Hz or 60Hz, be sure to use the respective input signal after adjustment.

Adjustment Item Table

TVG	Functionality		Service Data	Data Range	Function	Table & Note	Device Name Slava Address	RAM Address (Bit Range)
Category	No.	Name						
GEO	00	HPS	1E/16	3F	H Position	50/60Hz	CXA2130S (88H)	82 (7-2)
	01	HSZ	1F	3F	H Size	50/60Hz		81 (7-2)
	02	PAP	1F	3F	Pin Amp	50/60Hz		83 (7-2)
	03	TLT	7	0F	Trapezium	50/60Hz		85 (7-4)
	04	VPS	1F	3F	V Position	50/60Hz		7F (7-2)
	05	VSZ	1F	3F	V size	50/60Hz		7E (7-2)
	06	SCO	07	0F	S Correction	50/60Hz		80 (7-4)
	07	VLN	07	0F	V Linearity	50/60Hz		80 (3-0)
	08	BOW	07	0F	AFC Bow	50/60Hz		86 (7-4)
	09	AGL	07	0F	AFC Angle	50/60Hz		86 (3-0)
	0A	UPN	1F	3F	Upper Pin	50/60Hz		84 (7-2)
	0B	LPN	2F	3F	Lower Pin	50/60Hz		88 (7-2)
	0C	HBL	01	1	H Blanking on/off			67 (1)
	0D	LBL	0F	0F	Left H Blanking	50/60Hz		87 (7-4)
	0E	RBL	02	0F	Right H Blanking	50/60Hz		87 (3-0)
WHB	00	RDR	25/2A	3F	R Drive	DYNAMIC/others	CXA2130S (88H)	8F (7-2)
	01	GDR	2A	3F	G Drive (X / X)	DYNAMIC/others		90 (7-2)
	02	BDR	2A	3F	(Y / Y-5)	DYNAMIC/others		91 (7-2)
	03	RCT	07/07	0F	R Cutoff	SECAM/others		93 (3-0)
	04	GCT	07	0F	G Cutoff (X / X)	SECAM/others		94 (7-4)
	05	BCT	07	0F	B Cutoff (Y / Y)	SECAM/others		94 (3-0)
	06	BMN	15	1F	Brightness Minimum Data			97
	07	SBR	28	3F	Sub Brightness Control			98
SAJ	00	PMX	36/2F	3F	Picture Maximum Data PMX = 2F (25")		CXA2130S (88H)	96
	01	SHU	08	0F	Sub Hue Control	TV/Video		99
	02	SSH	05/08	0F	Sub Sharpness Control	TV/Video		9A
	03	SCL	*	3F	Sub Color Control	NTSC/others		9B
VP	00	EHT	05/05	0F	EHT Comp	50/60Hz	CXA2130S (88H)	85 (3-0)
	01	GMA	02	03	Gamma Correction (Std:01 Others :02)	Refer NVM Map A4		1A3 (1-0)
	02	YDL	06/09/08	0F	Y Delay	PAL/SECAM/NTSC		8C (3-0)
	03	SST	01	03	SECAM ID Start Position			6A (1-0)
	04	SSP	01	03	SECAM ID Stop Position			6A (3-2)
	05	SLV	02	03	SECAM ID Level			6B (1-0)
	06	SBF	22	3F	SECAM BELL f0			6B (7-2)
	07	DYC	01	1	Dynamic Color on/off			59 (1)
	08	ABL	01	1	ABL Mode Switching	STANDARD Always 0		58 (1)
	09	VTH	01	1	ABL Detection Vth Switching			58 (0)
	10	SFO	01/01	1	FO Switching for Sharpness	NTSC/others		198 (1)
	11	DCX	01	1	DC Trans. Ratio Switching			55 (1)

Adjustment Item Table

TVG	Functionality		Initial	Range	Function	Table & Note	Device Name Slava Address	RAM Address (Bit Range)
Category	No.	Name						
VP	12	SHT	01/01	1	Pre-/Overshoot ratio Switch	NTSC/others	CXA2130S (88H)	199 (0)
	13	HDW	00	1	H Drive Pulse Width Switch			4F (6)
	14	AFC	01/00/01	03	AFC Gain Control	TV/Video/Text		8D (1-0)
	15	HOS	07	0F	H Oscillation			5B (7-4)
	16	HSS	00	1	Slice Level of H Sync Sep.			5C (1)
	17	VSS	00	1	Slice Level of V Sync Sep.			5C (0)
	18	HMS	01/01	1	Macro Vision C/m off/on	50/60Hz		7E (0)
	19	YUV	01	1	YUV Switch Control			50 (0)
	20	CDV	01	3	CD mode for Video	Video only		1A1 (5-4)
	21	RON	01	1	R ON	not memorized		50 (3)
	22	GON	01	1	G ON	not memorized		50 (2)
	23	BON	01	1	B ON	not memorized		50 (1)
	24	PON	01	1	P ON	not memorized		4F (7)
	25	BLK	0	1	BLK Off			61 (0)
	26	VMC	00	1	VM Off			62 (0)
AP	00	INF	05	3F	Input Attenuation When surround off		TDA7429	19F (5-0)
	01	INS	0A	3F	Input Attenuation When surround on			1A0 (5-0)
	02	PH1	03	3	Phase 1 Register Selection			76 (1-0)
	03	PH2	00	3	Phase 2 Register Selection			76 (3-2)
	04	PH3	00	3	Phase 3 Register Selection			76 (5-4)
	05	PH4	00	3	Phase 4 Register Selection			76 (7-6)
	06	BCS	02	3	Bass Center Shift BCS = 0 FOR 25"			1A8 (1-0)
	07	TCS	02	3	Treble Center Shift			1A9 (1-0)
	08	TRF	02	3	RF Treble Offset			1A9 (5-4)
MSP	00	WST	15	FF	W/G Stereo Threshold		MSP3415D (84H)	157 (7-0)
	01	WBT	EC	FF	W/G Bilingual Threshold			158 (7-0)
	02	WLL	05	FF	W/G Monaural Threshold			159 (7-0)
	03	WAC	01	0F	W/G Agreement Count			15A (3-0)
	04	WDL	30	FF	W/G Search Delay			15B (7-0)
	05	NDL	20	FF	NICAM Search Delay			15C (7-0)
	06	SDL	10	FF	Stereo Status Read Delay			15D (7-0)
	07	AGC	01	1	AGC Switch Auto/Constant			108 (7)
	08	REL	28	3F	AGC Gain at Constant Mode			108 (6-1)
	09	CRM	00	1	Carrier muting on/off			107 (1)
	10	ACO	01	1	Audio Clock out on/off			10C (5)

Adjustment Item Table

TVG	Functionality		Initial	Range	Function	Table & Note	Slava Address	RAM Address (bit)
Category	No.	Name						
MSP	11	FP	1B	7F	FM Prescale for non-M system		MSP3415D (84H)	16C (6-0)
	12	FPM	32	7F	FM Prescale for M system			16D (6-0)
	13	FH	36	7F	FM Prescale for HDEV			16E (6-0)
	14	FHM	65	7F	FM Prescale for HDEV and M			16F (6-0)
	15	WGP	1C	7F	W/G Prescale			170 (6-0)
	16	NIP	7F	7F	NICAM Prescale			138 (6-0)
	17	ERR	50	FF	Auto FM Switch Threshold			166 (7-0)
	18	VOL	6D	FF	Loud Speaker gain 7000h to 7ff0h			1A7 (7-0)
TXT	00	TXH	01	3	Teletext Horizontal Position		(50H)	18D (1-0)
	01	TXV	0	3	Teletext Vertical Position			18D (6-4)
OPM	00	OSH	11	3F	OSD H Position	Option-Misc		AC (7-2)
	01	COM	1	03	Comb Selection			A5 (7-6)
	02	APC	1	1	APC Switch			A4 (5)
	03	TSY	00	03	TV Sys at Auto TV Sys			A4 (4-3)
	04	MUT	00	1	No Signal Mute			A4 (0)
	05	AFM	01	1	Auto FM Switch			A4 (1)
	06	RFB	0	3	C-BPF Control			A5 (5-4)
	07	TVO	02	7	Tilt to V-Angle Offset			A5 (2-0)
	08	DBL	00	1	Disable Blueback Function			A4 (2)
OPB	00	OP1	#	FF	Optional Bits 1 (see below)	Option-Bits		45
	01	OP2	#	FF	Optional Bits 2 (see below)			46
	02	OP3	#	FF	Optional Bits 3 (see below)			47

NOTE

- shaded items are fixed data.
- Standard data listed on the Adjustment Item Table are reference values, therefore it may be different for each model and for each mode.
- Note for Different Data Those are the standard data values written on the microprocessor. Therefore, the data values of the modes and stored respectively in the memory.
  In case of a device replacement, adjustment by rewriting the data value is necessary for some items.

ITEM INFORMATION

OP1

Item	XTAL 4.43	XTAL 3.58	SECAM	2nd. Lang	B/G	I	D/K	M
KV-XG29M85	1	1	1	1	1	1	1	1

NOTE: When Bit 7,6& 5 = 000, Only PAL color system is selected.
When Bit 7 is selected, Auto, PAL & NTSC 4.43 Color system is enable.
When Option is single color system, Color system cannot be changed & "AUTO" will not be displayed.

OP2

Item	TOP	NICAM	HDEV	Thai Bil	Dis Fav.	DVD Input	AV Input	
KV-XG29M85	0	0	0	0	0	0	1	0

AV Input	00 = no AV Input 01 = 1 AV Input 10 = 2 AV Input 11 = 3 AV Input
DVD Input	Effective only when "AV Input" is set to 3 AV Input
Dis Fav.	Disable Favorite Channel (Only Effective For 21" & 14" Models Only)

OP3

Item	PIC Rotate*1	2199 Curve*1	Auto PIC	Auto TV sys	US ST	AV Mono	11 KEY	Color SW*2&*1
KV-XG29M85	1	0	1	0	0	0	0	0

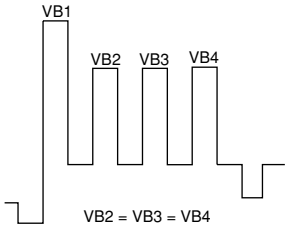
PIC Rotate*1	PIC Rotation Switch	0 = disabled, 1 = enabled
2199 Curve*1	2199 volume Curve Selection	0 = Others, 1 = 2199 Volume Curve.
Auto PIC	Auto Picture Improvement	0 = inactive 1 = activate
A-TVsys	Auto TV System in Auto Program	0 = disabled, 1 = enabled
US ST	USA Stereo	0 = disabled, 1 = enabled
AV MONO*1	AV Mono models	0 = Stereo, 1 = Mono (No Balance & Surround selection)
11 Key	Front Key Selection	0 = 7 key model, 1 = 11 key model
Color SW*2&*1	Color Data Selection in Dynamic Mode	0 = 65 (No PIP), 1 = 57 (PIP)

Note: *1 - For XA-21/XG25 Models Only
*2 - For XA-34/29/25 Models Only

4-3. PICTURE QUALITY ADJUSTMENTS

SUB COLOR ADJUSTMENT

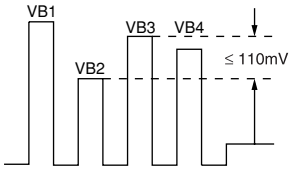
1. Input a PAL color-bar.
2. Set to the following condition:
   PICTURE 100%, BRIGHTNESS 50%, COLOR 50%
3. Connect an oscilloscope to pin ① (B OUT) of CN305, A board.
4. Set to Service Mode and select SAJ 3 'SCL' with [1] and [4] of the commander then adjust to VB2=VB3=VB4 with [3] and [6].
5. Press [MUTING] → [0] of the commander to write the data.
6. Adjust SAJ 3 'SCL' as step 2 to 5 when receiving NTSC color-bar.



VB2 = VB3 = VB4 (Difference is within 70mV)

SUB HUE ADJUSTMENT

1. Select Video.
2. Input a NTSC, color-bar, into Video.
3. Set the following condition:
   PICTURE 100%, BRIGHTNESS 50%, COLOR 50%
4. Connect an oscilloscope to pin ① (B OUT) of CN305, A board.
5. Select SAJ 1 'SHU' with [1] and [4] of the commander by setting to Service Mode and adjust to VB1=VB2=VB3=VB4 with [3] and [6].



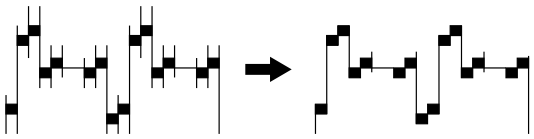
VB1 = VB2 = VB3 = VB4

The highest level of VB1,VB2,VB3,VB4 must be aligned at the same line. Ideal difference level between VB2 and VB3 should be within ± 110mV.

6. Press [MUTING] → [0] of the commander to write the data.

BELL FILTER ADJUSTMENT

1. Input SECAM color bar.
2. Connect the dual trace oscilloscope to CN303 pin ⑨ (not mounted).
3. Adjust SERVICE MODE, ITEM (SBF) as below.



4-4. DEFLECTION ADJUSTMENT

1. Set to Service Mode.
2. Input PAL color bar.
3. Using the [1] and [4] button, select category GEO (Service Mode).
4. Raise/lower the data using the [3] and [6] buttons. Select and adjust the following items to obtain optimum image.

Service Item

GEO :	00	HPS	H POSITION
	01	HSZ	H SIZE
	02	PAP	PIN AMP
	03	TLT	TRAPEZIUM
	04	VPS	V POSITION
	05	VSZ	V SIZE
	06	SCO	S CORRECTION
	07	VLN	V LINEARITY
	08	BOW	AFC BOW
	09	AGL	AFC ANGLE
	0A	UPN	UPPER CORNER PIN
	0B	LPN	LOWER CORNER PIN

5. Input 525/60Hz signal.
6. Using the [1] and [4] button select category GEO (Service Mode).
7. Select and adjust the following items to obtain optimum image. Raise/lower the data with the [3] and [6] buttons.

Service Item

GEO :	00	HPS	H POSITION
	01	HSZ	H SIZE
	02	PAP	PIN AMP
	03	TLT	TRAPEZIUM
	04	VPS	V POSITION
	05	VSZ	V SIZE
	06	SCO	S CORRECTION
	07	VLN	V LINEARITY
	08	BOW	AFC BOW
	09	AGL	AFC ANGLE
	0A	UPN	UPPER CORNER PIN
	0B	LPN	LOWER CORNER PIN

4-5. H-TRAPEZOID ADJUSTMENT

1. Receive cross hatch/dot signal.

2. Adjust RV1801 on C6 board to make H-trapezoid distortion best.

4-6. A BOARD ADJUSTMENT AFTER IC003 (MEMORY) REPLACEMENT

1. Enter to Service Mode.

2. Press commander buttons [5] and [0] (Data Initialize), and [2] and [0] (Data Copy) to initialize the data.

3. Call each item number and check if the respective screen shows the normal picture.
   In cases where items are not well adjusted, rectify the items with fine adjustment.
   Write the data per each item number ([MUTING] +[0]).

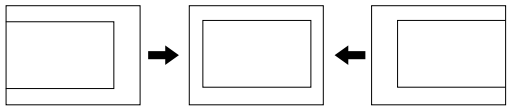
4. Select item numbers "OPB00" (OP1), "OPB01" (OP2), "OPB02" (OP3), and respectively set the bit per model with command buttons [3] and [6].

5. Press commander buttons [8] and [0] (Test Normal) to return to the data that was set on the shipment from the factory. (This will also cancel Service Mode.)

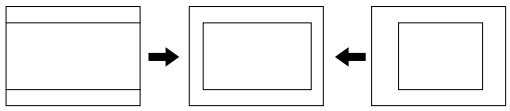
4-7. PICTURE DISTORTION ADJUSTMENT (1)

Item Number 00 – 0B

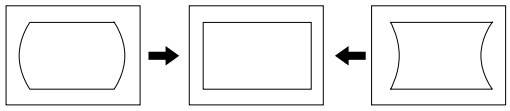
GEO 0 HPS (H POSITION)



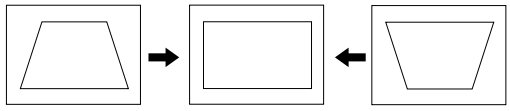
GEO 1 HSZ (H SIZE)



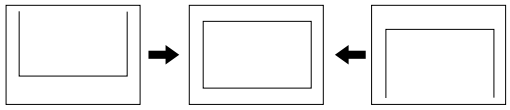
GEO 2 PAP (PIN AMP)



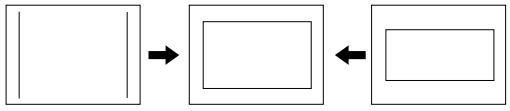
GEO 3 TLT (TRAPEZIUM)



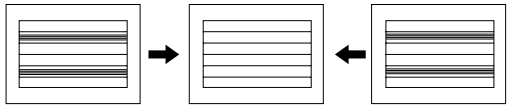
GEO 4 VPS (V POSITION)



GEO 5 VSZ (V SIZE)

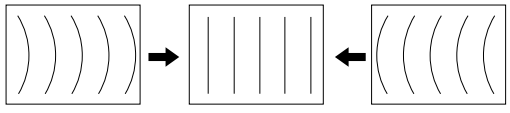


GEO 6 SCO (VERTICAL S-Correction)

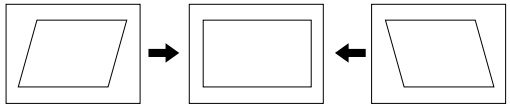


GEO 7 VLN (V LINEARITY)

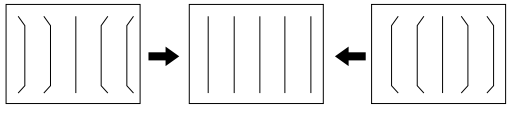
GEO 8 BOW (AFC.BOW)



GEO 9 AGL (AFC.ANGLE)

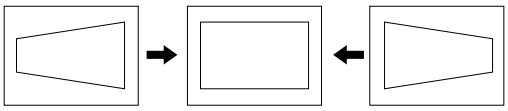


GEO 0A UPN (UPPER CORNER PIN)
GEO 0B LPN (LOWER CORNER PIN)



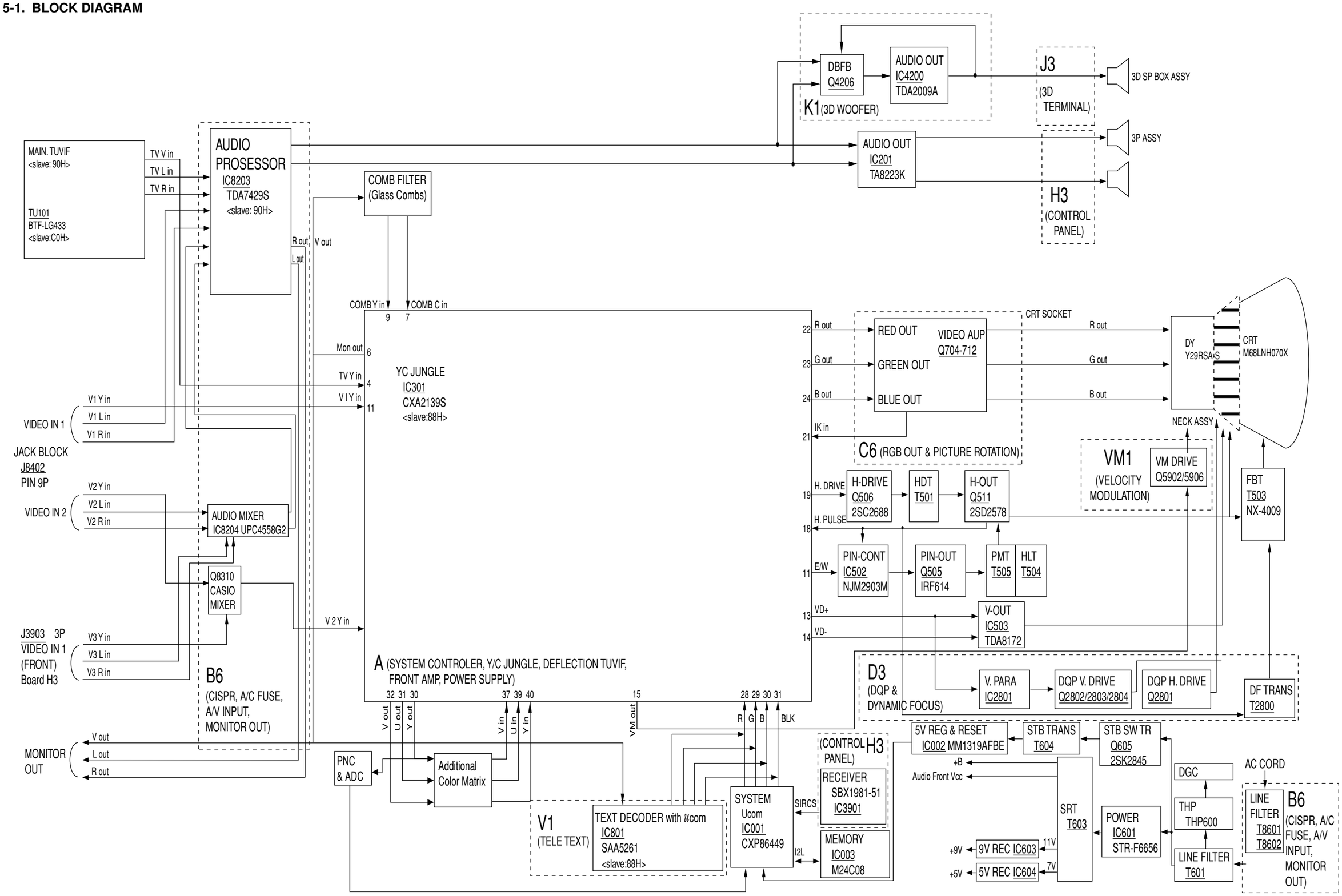
PICTURE DISTORTION ADJUSTMENT (2)

H-TRAPEZOID (Rotate RV1801)

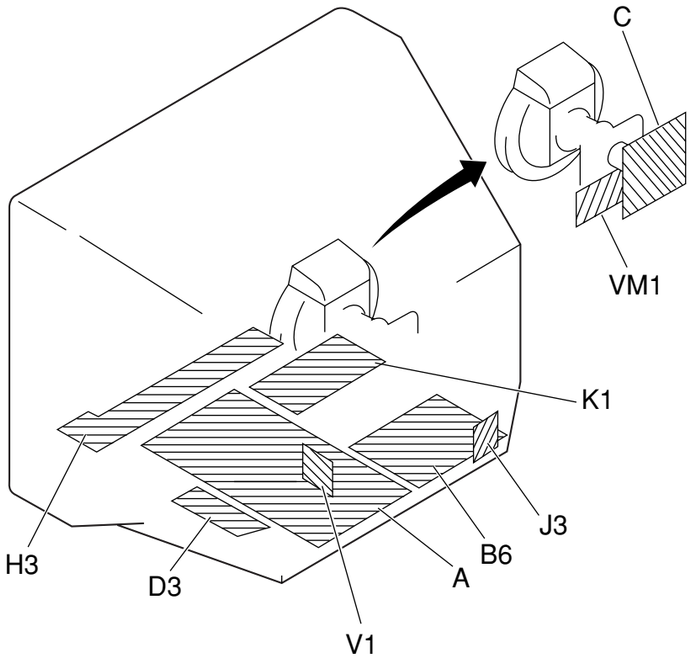


SECTION 5
DIAGRAMS

5-1. BLOCK DIAGRAM



5-2. CIRCUIT BOARDS LOCATION



5-3. SCHEMATIC DIAGRAM

Note:

- All capacitors are in µF unless otherwise noted.
- All electrolytic capacitors are rated at 50V unless otherwise noted.
- All resistors are in ohms.
  kΩ = 1000Ω, MΩ = 1000kΩ
- Indication of resistance which does not have rating electrical power is as follows.

  Pitch: 5 mm
  Rating electrical power 1/4W (CHIP: 1/10W)

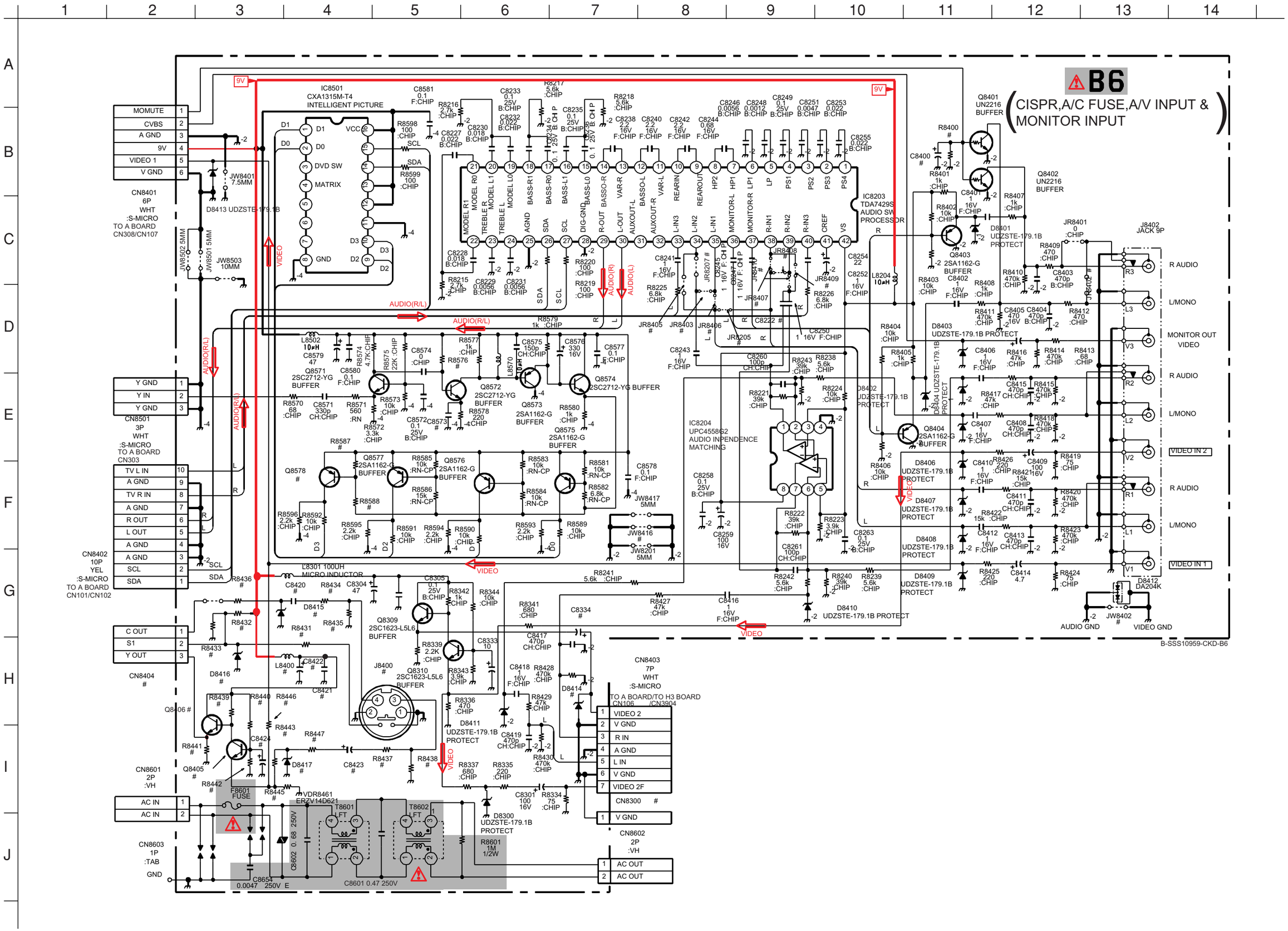
- : nonflammable resistor.
- △ : internal component.
- ☐ : panel designation or adjustment for rrepair.
- All variable and adjustable resistors have characteristic curve B unless otherwise noted.
- **Redings are taken with a color-bar signal input.**
  no mark : Common
  ( ) : PAL
  [ ] : NTSC 3.58
- **Readings are taken with a 10M digital m ultimeter.**
- **Voltage are dc with respect to ground unless otherwise noted.**
- **Voltage variations may be noted due to normal production tolerances.**
- **All voltage are in V.**
- ✻ **: Cannot be measured.**
- **Circled numbers are waveform references.**
- **: B +bus.**
- **: B –bus.**
- **: signal path.**

Reference information

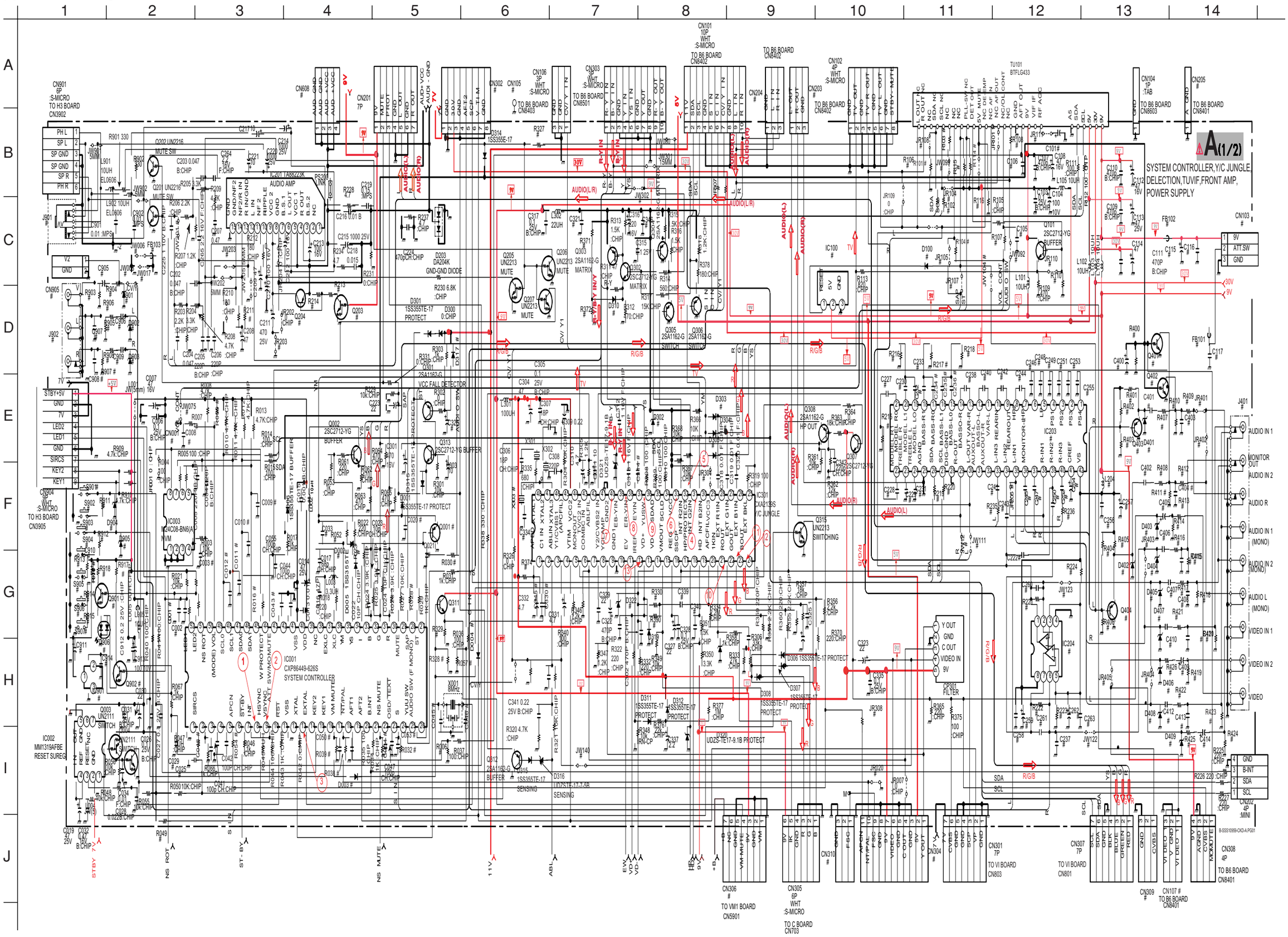
RESISTOR	: RN	METAL FILM
	: RC	SOLID
	: FPRD	NONFLAMMABLE CARBON
	: FUSE	NONFLAMMABLE FUSIBLE
	: RS	NONFLAMMABLE METAL OXIDE
	: RB	NONFLAMMABLE CEMENT
	: RW	NONFLAMMABLE WIREWOUND
	: ✻	ADJUSTMENT RESISTOR
COIL	: LF-8L	MICRO INDUCTOR
CAPACITOR	: TA	TANTALUM
	: PS	STYROL
	: PP	POLYPROPYLENE
	: PT	MYLAR
	: MPS	METALIZED POLYESTER
	: MPP	METALIZED POLYPROPYLENE
	: ALB	BIPOLAR
	: ALT	HIGH TEMPERATURE
	: ALR	HIGH RIPPLE

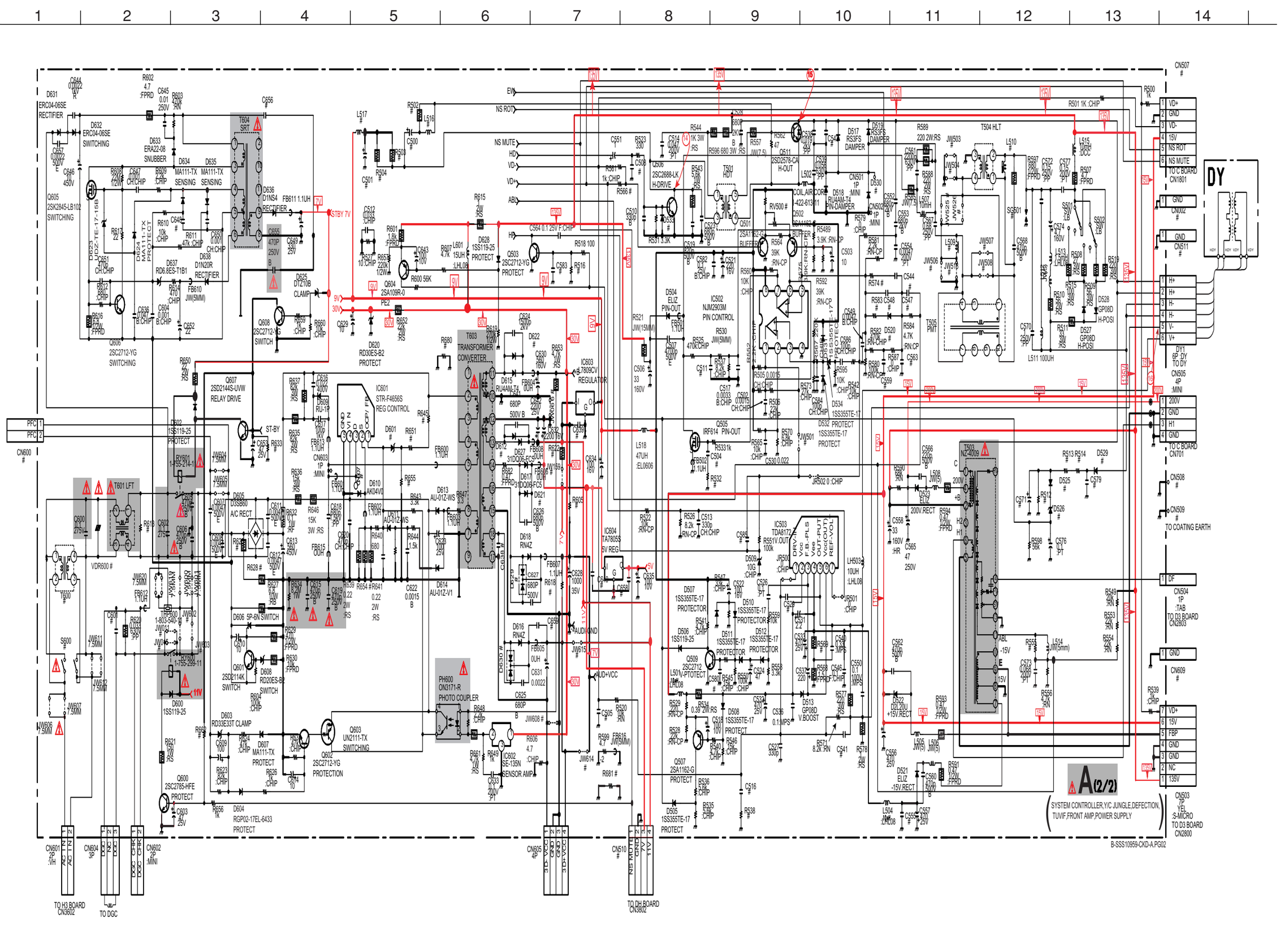
Note: The component identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

(1) Schematic Diagram of B6 Board



(2) Schematic Diagram of A Board




1
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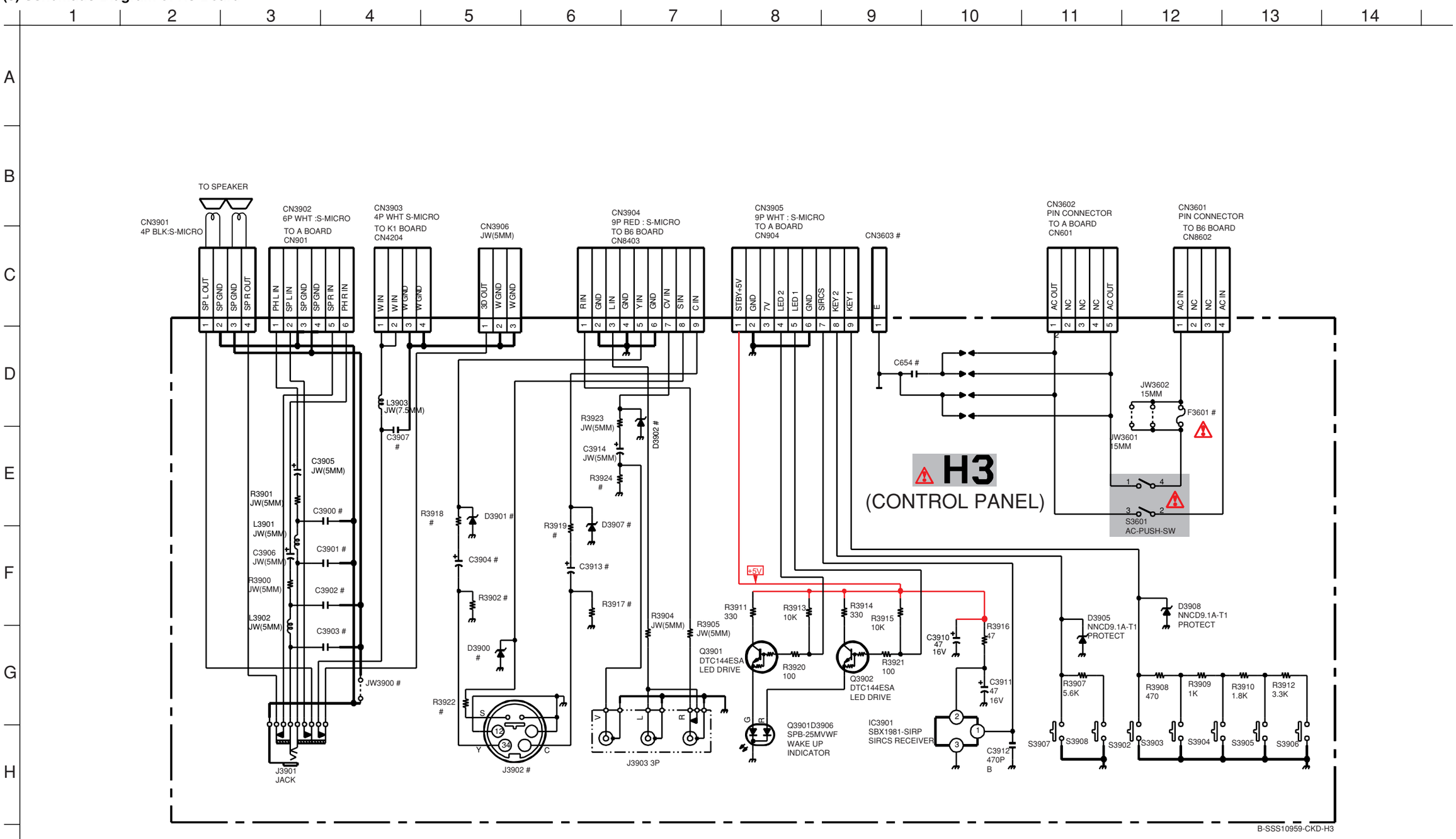
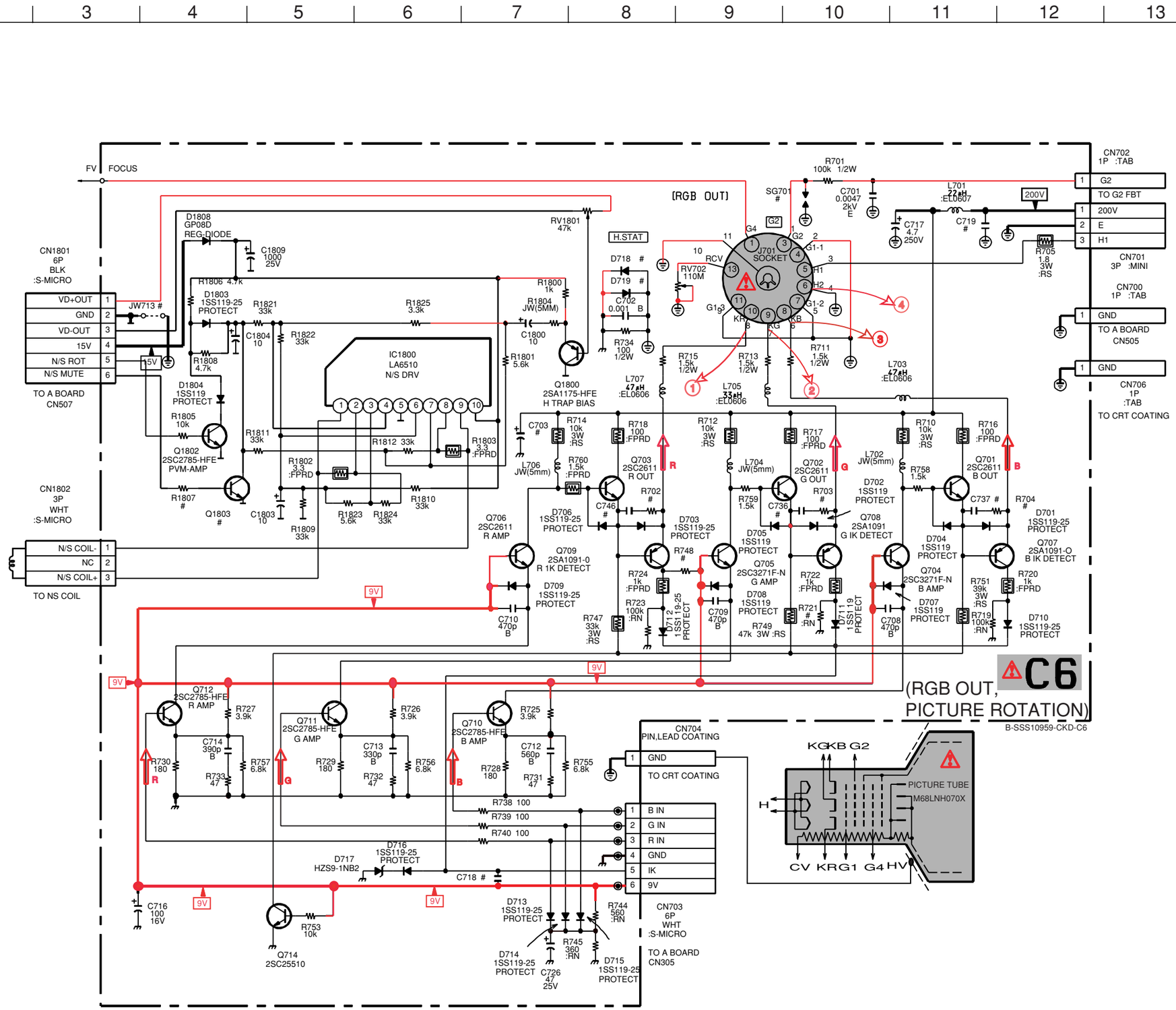
13
14
A
B
C
D
E
F
G
H
I
J
DY
A (2/2)
SYSTEM CONTROLLER,Y/C JUNGLE,DEFECTION, TUVIF,FRONT AMP,POWER SUPPLY
B-SSS10959-CKD-A.PG02
TO H3 BOARD CN3602
TO DGC
TO DH BOARD CN3802
TO C BOARD CN1801
TO C BOARD CN701
TO COATING EARTH
TO D3 BOARD CN2803
TO D3 BOARD CN2800
STBY 7V
AUDIO GND
AUD+VCC
+5V
+15V
-15V
+135V
PROTECT
REGULATOR
SWITCHING
RELAY DRIVE
SENSOR AMP
PHOTO COUPLER
TRANSFORMER CONVERTER
REG CONTROL
PIN CONTROL
H-DRIVE
H-OUT
PIN-OUT
PIN-DAMPER
BUFFER
A/C RECT
+15V.RECT
-15V.RECT
V.BOOST
+5V REG
PROTECTOR
PROTECTION
SWITCH
CLAMP
RECTIFIER
SNUBBER
SENSING

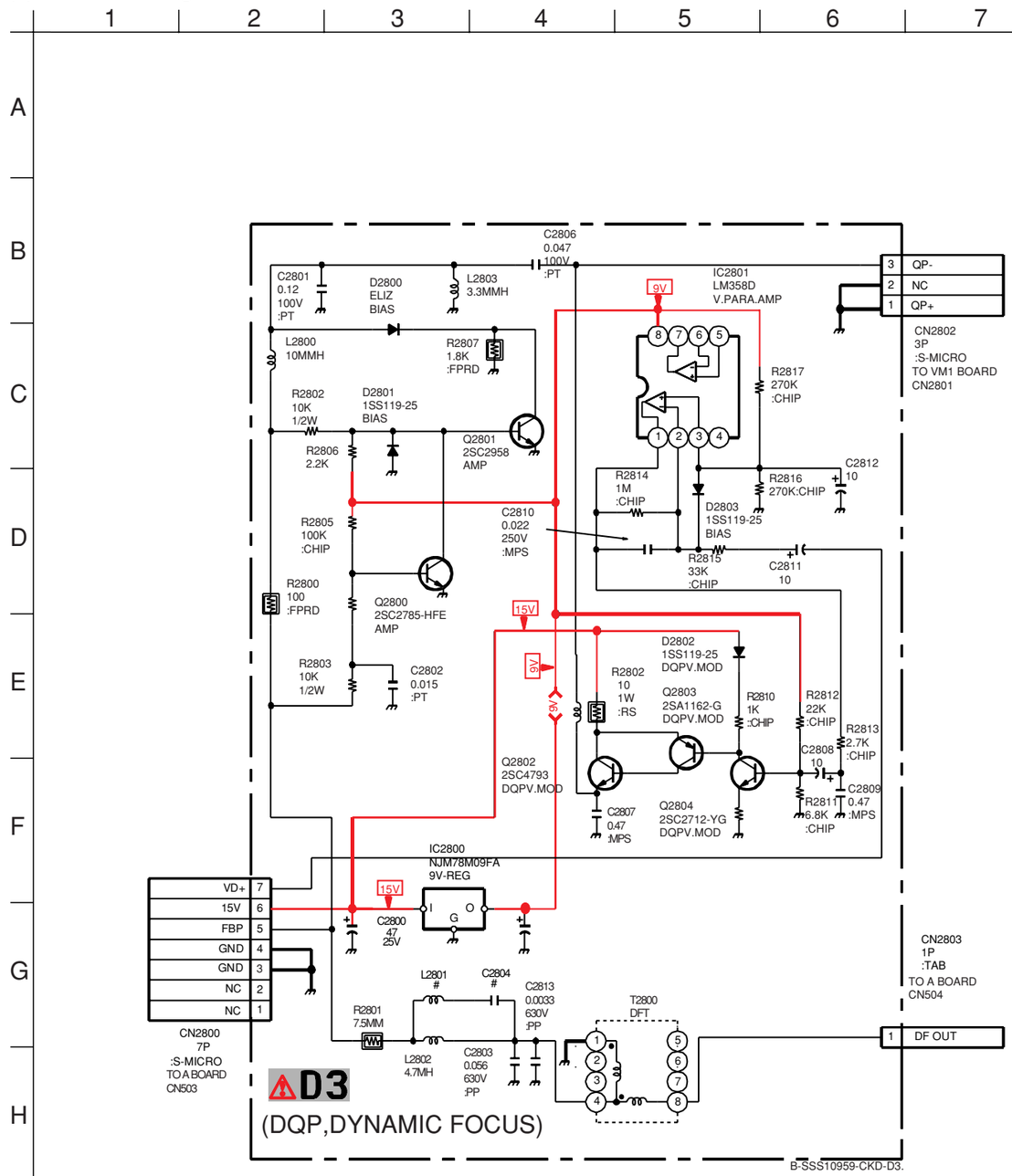
(3) Schematic Diagram of H3 Board

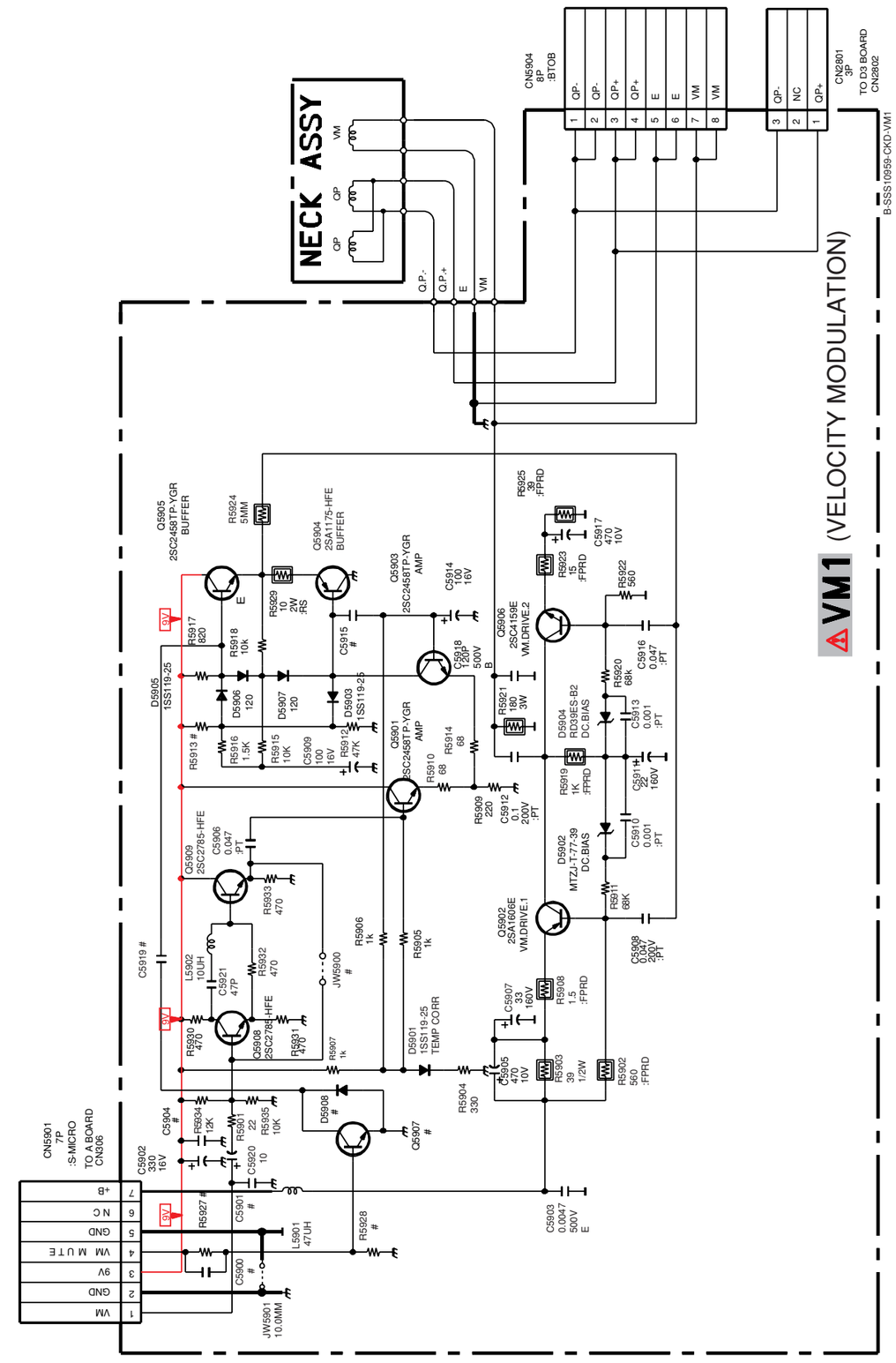


(4) Schematic Diagram of C6 Board

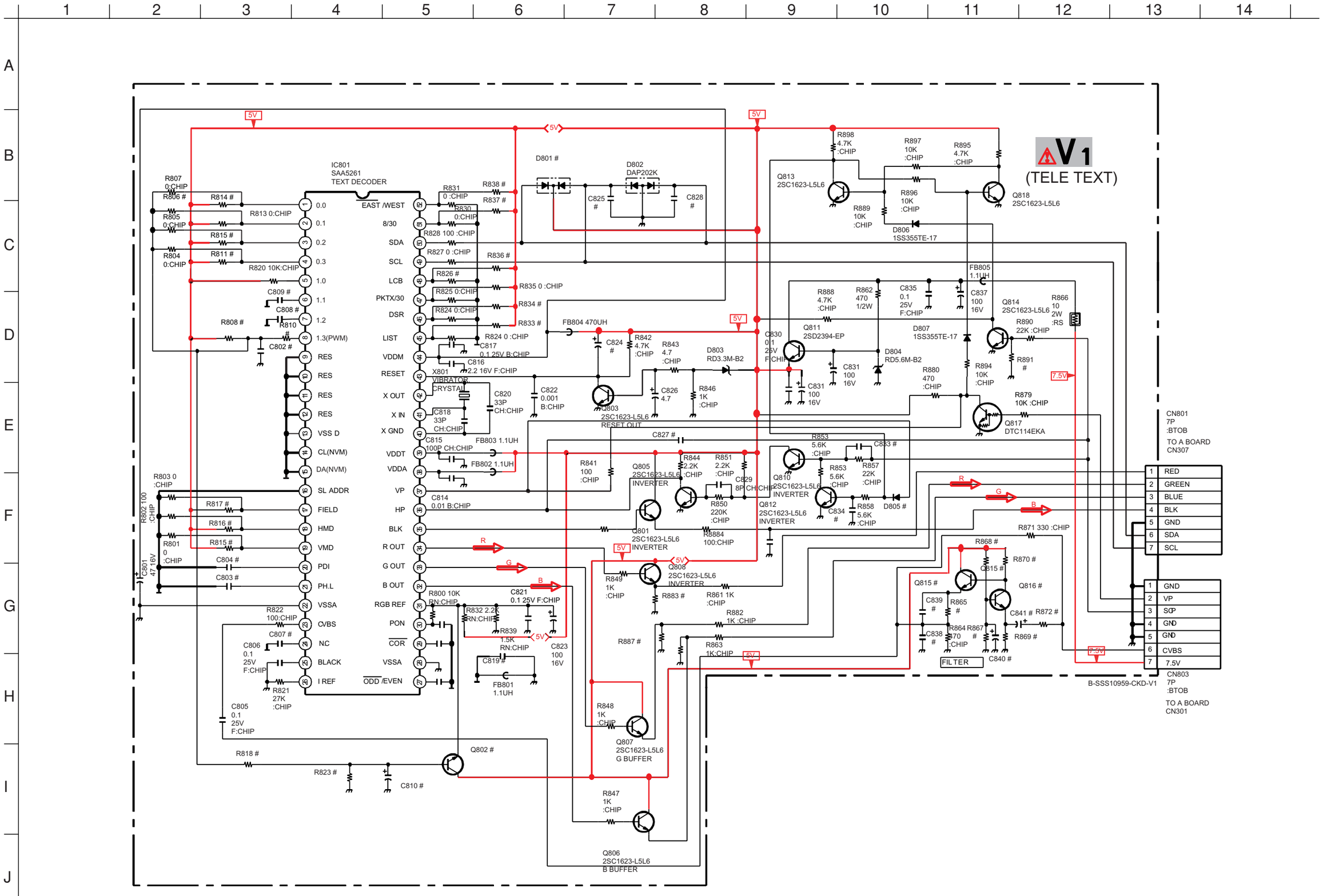


(5) Schematic Diagrams of D3 and VM1 Boards

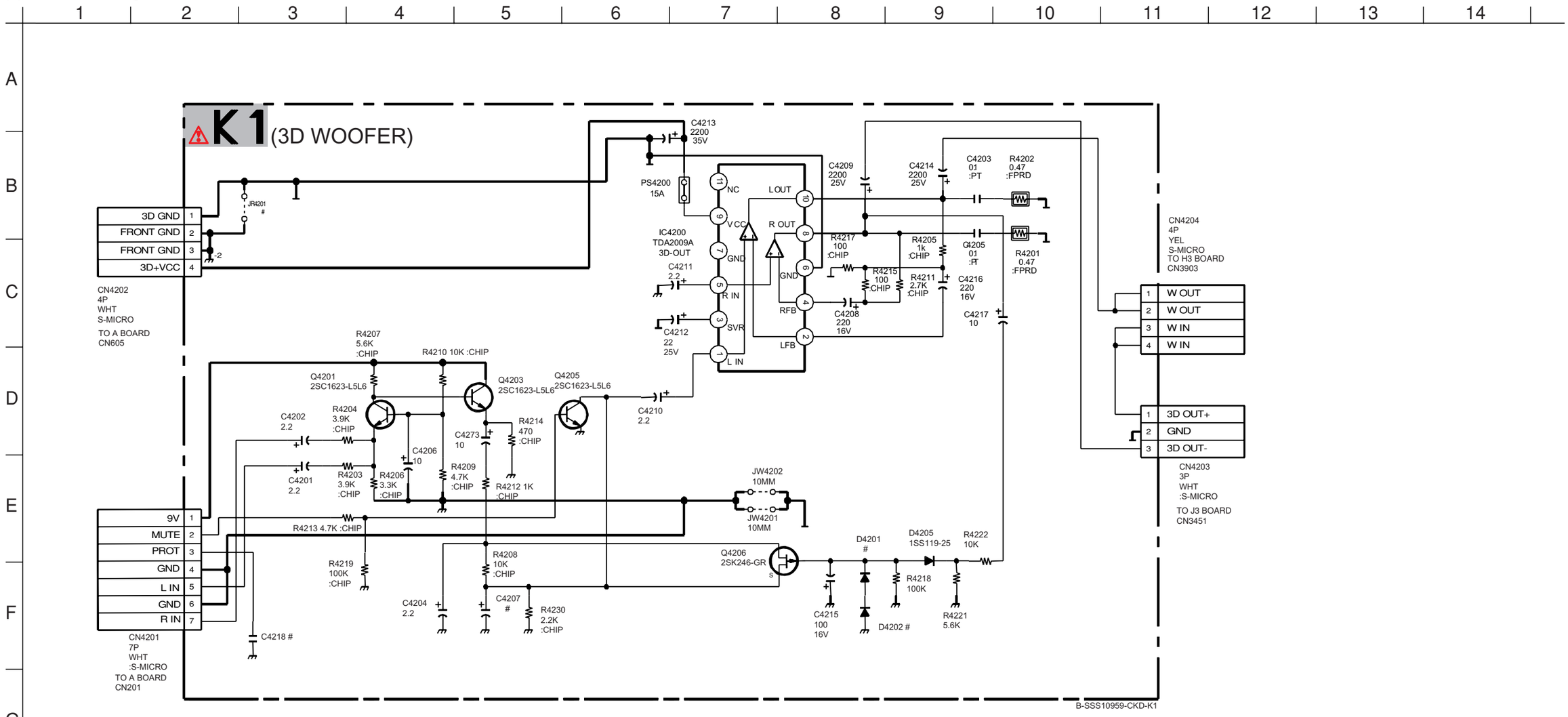


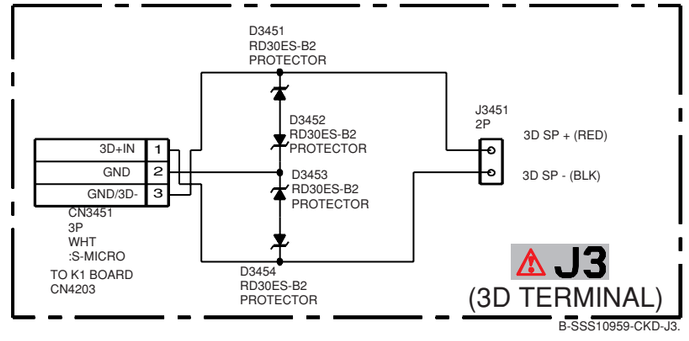


(6) Schematic Diagram of V1 Board



(7) Schematic Diagrams of K1 and J3 Boards





5-4. VOLTAGE MEASUREMENT

A(1/2) BOARD VOLTAGE LIST

Ref	Pin No	Voltage[v]
IC001	1	0
	2	4.9
	3	0.3
	4	4.9
	5	4.9
	6	4.9
	7	3.9
	8	4.9
	9	0.3
	10	4.9
	11	5.0
	12	0
	13	2.2
	14	2.1
	15	5.0
	16	5.0
	17	0
	18	0
	19	(2.3) [4.7]
	20	(0.3) [0.5]
	21	5.0
	22	0
	23	4.9
	24	0.4
	25	4.9
	26	4.9
	27	4.9
	28	5.0
	29	0
	30	0
	31	0
	32	0
	33	5.0
	34	0
	35	0
	36	2.6
	37	2.6
	38	0
	39	5.0
	40	0
	41	0.2
	42	0.3
	43	0
	44	5.0
	45	5.0
	46	4.7
	47	5.0
	48	4.7
	49	0
	50	3.4
	51	0
	52	0
	54	4.7
IC002	1	0
	2	5.0
	3	4.9
	4	7.5
	5	0
	6	0
	7	0

Ref	Pin No	Voltage[v]
IC003	1	0
	2	0
	3	0
	4	0
	5	5.0
	6	5.0
	7	0
	8	5.0
IC201	1	0
	2	21.9
	3	11.9
	4	(22.2) [22.5]
	5	11.8
	6	(21.9) [22.1]
	7	0
	8	22.2
	9	11.6
	10	0.5
	11	0
	12	0
	13	0
	14	0.5
	15	0
IC301	1	3.3
	2	5
	3	1.4
	4	5.0
	5	4.7
	6	4.3
	7	5.1
	8	4.5
	9	5
	10	0
	11	37
	12	2.3
	13	3.5
	14	3.4
	15	5.6
	16	7.6
	17	0.6
	18	3.6
	19	3
	20	3.8
	21	3.4
	22	1.7
	23	1.6
	24	1.5
	25	0
	26	4.4
	27	4.4
	28	4.4
	29	0
	30	4.0
	31	4
	32	3.6
	33	8.7
	34	4.6
	35	4.8
	36	4.6

Ref	Pin No	Voltage[v]
	37	3.9
	38	5.1
	39	(0) [5.1]
	40	0
	41	5
	42	6.4
	43	5
	44	8.6
	45	5.1
	46	0
	47	(0) [2.4]
	48	0
IC502	1	1.0
	2	(0) [3.5]
	3	1.8
	4	0
	5	2.9
	6	2.4
	7	7.0
	8	8.8
IC503	1	1.5
	2	13.1
	3	-13.3
	4	-14.7
	5	0.4
	6	13.2
	7	1.5
IC601	1	0.8
	2	-0.3
	3	(6.4) [*]
	4	8.7
	5	0.3
IC602	1	120
	2	(134) [135]
	3	0
IC603	I	12.6
	G	0
	O	8.8
IC604	I	8.3
	G	0
	O	5.0
PH600	1	128.2
	2	127
	3	1.6
Q002	B	0
	C	5
	E	0
Q003	B	5
	C	0
	E	4.7
Q004	B	0
	C	4.9
	E	0
Q101	B	(2.9) [3.7]
	C	8.8
	E	(3.5) [4.4]

A(2/2) BOARD VOLTAGE LIST

Ref	Pin No	Voltage[v]	Ref	Pin No	Voltage[v]
Q201	B	0	Q503	B	0
	C	0		C	3.6
	E	0		E	0
Q202	B	0	Q505	B	6.9
	C	0		C	0
	E	0		E	16.4
Q203	B	0	Q506	B	-0.5
	C	0		C	(90) [94.0]
	E	8.8		E	0
Q205	B	0	Q507	B	13
	C	11.6		C	0.5
	E	0		E	12.5
Q206	B	0	Q509	B	0
	C	0		C	0.1
	E	(8) [0]		E	0.6
Q207	B	0	Q511	B	0
	C	0		C	135
	E	0		E	0
Q301	B	12.4	Q600	B	0
	C	0		C	12.3
	E	12.6		E	0
Q302	B	4.1	Q601	B	-0.6
	C	8		C	-0.5
	E	4.7		E	(-1.4) [-0.3]
Q303	B	8.7	Q602	B	-0.2
	C	(0) [4.5]		C	*
	E	8		E	0.2
Q304	B	4.2	Q603	B	8.9
	C	0		C	(1.7) [1.4]
	E	3.6		E	(0) [5.5]
Q305	B	4.7	Q604	B	133.9
	C	0		C	0
	E	4.0		E	134.1
Q306	B	4.7	Q605	G	0
	C	0		S	-0.5
	E	4.0		O	(123.3) [134.4]
Q307	B	3.6	Q606	B	-0.5
	C	(0) [8.6]		C	0
	E	4.3		E	-0.3
Q308	B	0.7	Q607	B	0.7
	C	0.2		C	0
	E	3.5		E	0
Q312	B	6.4	Q608	B	0
	C	0		C	0.7
	E	5.1		E	0
Q313	B	0			
	C	12.4			
	E	0			
Q315	B	0			
	C	2.1			
	E	0			
Q501	B	4			
	C	0			
	E	3.4			
Q502	B	4.0			
	C	2.4			
	E	4.2			

K1 BOARD VOLTAGE LIST

Ref	Pin No	Voltage[v]
IC4200	1	1.3
	2	0.7
	3	14.2
	4	0.7
	5	1.3
	6	0
	7	0
	8	12.9
	9	26.0
	10	12.9
	11	0
Q4201	B	2.2
	C	0
	E	2.8
Q4203	B	4.2
	C	8.8
	E	4.9
Q4205	B	0
	C	0
	E	0
Q4206	B	0
	C	0
	E	0

H3 BOARD VOLTAGE LIST

Ref	Pin No	Voltage[v]
IC3901	1	4.9
	2	4.9
	3	0
Q3901	B	0.1
	C	5.0
	E	0.1
Q3902	B	0
	C	5.0
	E	0

C6 BOARD VOLTAGE LIST

Ref	Pin No	Voltage[v]
IC1800	1	3.1
	2	3.0
	3	4.8
	4	4.8
	5	0
	6	5.1
	7	5.1
	8	8.1
	9	8.0
	10	12.5
J701	G2	301
	H1	0
	KB	156
	KG	146
	KR	149
Q701	B	156
	C	204
	E	160
Q702	B	145
	C	204
	E	147
Q703	B	148
	C	204
	E	(150) [147]
Q704	B	8.8
	C	157
	E	8.3
Q705	B	8.8
	C	145
	E	8.3
Q706	B	8.8
	C	(152) [144]
	E	(8.3) [8.2]
Q707	B	160
	C	(5.4) [203]
	E	158.9
Q709	B	(151) [144]
	C	(5.0) [5.5]
	E	148.9
Q708	B	145
	C	5.6
	E	146
Q710	B	1.5
	C	8.3
	E	1.1
Q711	B	1.7
	C	8.3
	E	1.3
Q712	B	1.6
	C	8.3
	E	1.3
Q714	B	0.6
	C	0.1
	E	0
Q1800	B	3.6
	C	0
	E	4.3
Q1802	B	0.5
	C	0.8
	E	0

B6 BOARD VOLTAGE LIST

Ref	Pin No	Voltage[v]	Ref	Pin No	Voltage[v]
IC8204	1	4.4		5	0.3
	2	4.4		6	0.3
	3	4.4		7	0.3
	4	4.4		8	0
	5	4.4		9	0
	6	4.4		10	0
	7	4.4		11	0
	8	4.4		12	8.8
	9	4.4		13	8.8
	10	4.4		14	4.6
	11	4.4		15	4.7
	12	4.4		16	8.8
	13	4.4	Q8309	B	4.4
	14	4.4		C	8.8
	15	4.4		E	5.0
	16	4.4	Q8310	B	1.7
	17	4.4		C	(2.8) [5.0]
	18	4.4		E	2.4
	19	4.5	Q8401	B	0
	20	4.4		C	0
	21	4.4		E	0
	22	4.4	Q8402	B	0
	23	4.4		C	0
	24	4.4		E	0
	25	0	Q8403	B	5.1
	26	4.7		C	0
	27	4.6		E	4.5
	28	0	Q8404	B	5.1
	29	3.7		C	0
	30	3.7		E	4.4
	31	3.7	Q8571	B	2.1
	32	4.4		C	5.4
	33	4.4		E	0
	34	4.4	Q8572	B	4.7
	35	4.4		C	8.8
	36	4.4		E	5.4
	37	4.4	Q8573	B	8.7
	38	4.4		C	0
	39	4.4		E	8.8
	40	4.4	Q8574	B	8.0
	41	4.4		C	8.8
	42	8.8		E	8.7
IC8204	1	4.9	Q8575	B	8.8
	2	2.4		C	0
	3	2.4		E	8.3
	4	0	Q8576	B	8.8
	5	2.4		C	0
	6	2.4		E	8.4
	7	4.9	Q8577	B	8.8
	8	8.8		C	0
IC8501	1	0		E	8.5
	2	0			
	3	0.3			
	4	0.3			

D3 BOARD VOLTAGE LIST

Ref	Pin No	Voltage[v]
IC2800	I	13.2
	G	0
	O	9.0
IC2801	1	4.4
	2	4.4
	3	4.4
	4	0
	5	(0.8) [0.5]
	6	(0.8) [0.5]
	7	7.8
	8	8.9
Q2800	B	*
	C	0.3
	E	0
Q2801	B	0.3
	C	*
	E	0
Q2802	B	2.4
	C	12.6
	E	1.8
Q2803	B	12.6
	C	2.5
	E	12.1
Q2804	B	1.5
	C	12
	E	2.1

VM1 BOARD VOLTAGE LIST

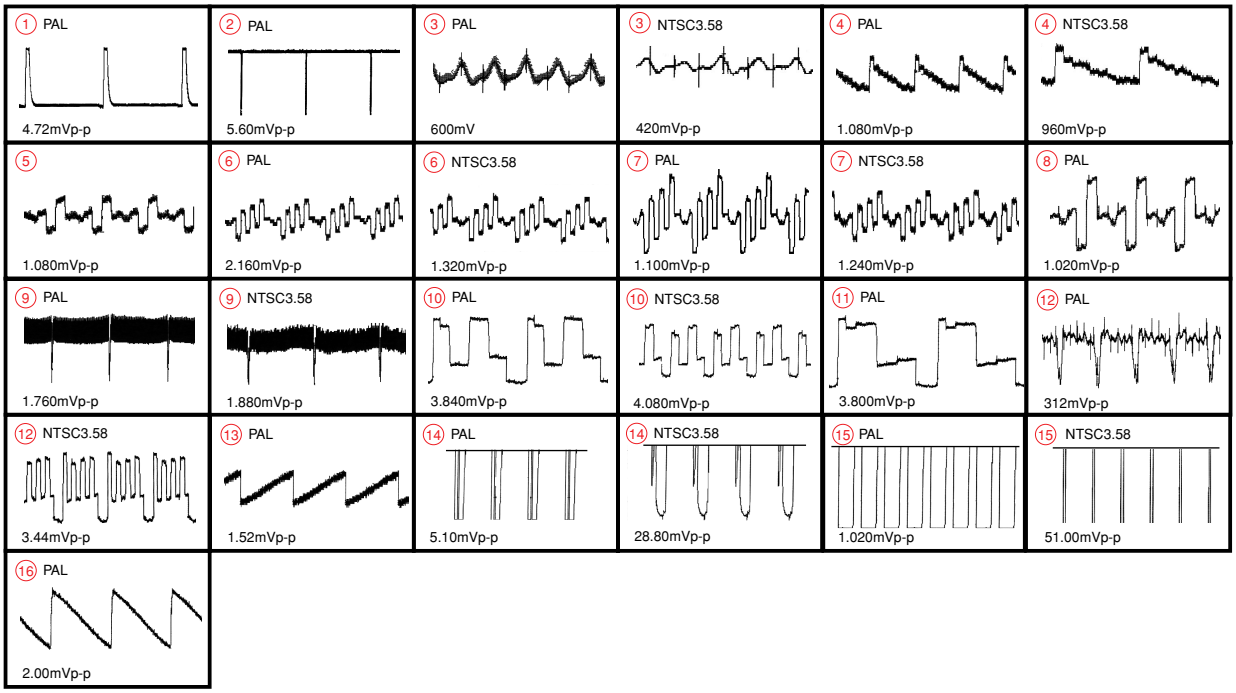
Ref	Pin No	Voltage[v]
Q5901	B	2.6
	C	8.8
	E	2.0
Q5902	B	134
	C	(67) [95]
	E	(135) [135]
Q5903	B	[4.7]
	C	[4.7]
	E	[2]
Q5904	B	[4.7]
	C	0
	E	[5.1]
Q5905	B	[5.6]
	C	[8.8]
	E	[5.1]
Q5906	B	0.2
	C	(67) [95]
	E	0
Q5908	B	[3.8]
	C	5.6
	E	[3.2]
Q5909	B	[3.2]
	C	[8.8]
	E	(2.5) [3.2]

V1 BOARD VOLTAGE LIST

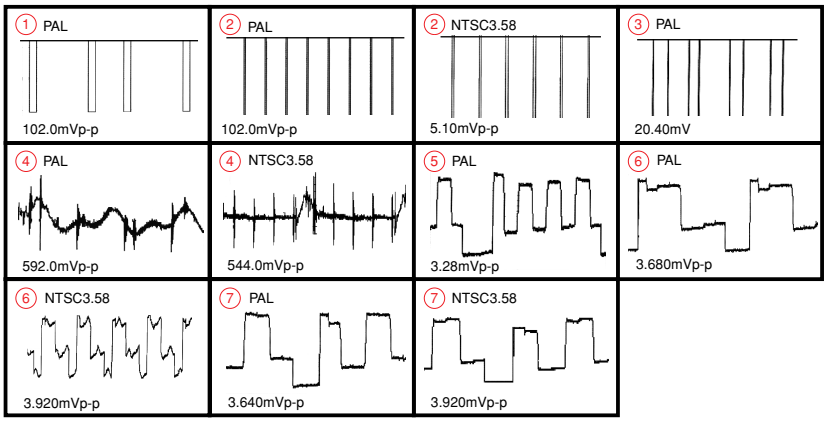
Ref	Pin No	Voltage[v]	Ref	Pin No	Voltage[v]
IC801	1	0.5		46	0
	2	4.9		47	4.9
	3	0.6 [0.4]		48	0
	4	0.6 [0.5]		49	4.6
	5	4.9		50	4.7
	6	0.7 [0.4]	Q801	B	1.9
	7	0.8 [0.5]		C	(4.9) [0.7]
	8	0.7 [0.4]		E	0
	9	0	Q803	B	0
	10	0		C	(4.9) [0]
	11	0		E	0.6
	12	0	Q805	B	0
	13	0		C	1.1
	14	0		E	0.3
	15	0	Q806	B	0
	16	0		C	4.9
	17	0		E	0
	18	0	Q807	B	0
	19	0		C	4.9
	20	0.7 [0.4]		E	0
	21	0.2 [0.4]	Q808	B	0
	22	0		C	4.9
	23	1.8 [2.1]		E	0
	24	0.7 [0.4]	Q810	B	0
	25	1.7 [1.9]		C	0
	26	2.4		E	0.2
	27	0	Q811	B	5.5
	28	0		C	7.1
	29	0.6		E	4.9
	30	1.9	Q812	B	0
	31	1.9		C	0.2
	32	0		E	0
	33	0	Q813	B	0
	34	0		C	0
	35	0		E	0.6
	36	1.1	Q814	B	0
	37	0.1		C	2.6
	38	4.9		E	0.2
	39	4.9	Q817	B	0
	40	0		C	0.1
	41	2.3		E	2.7
	42	2.4	Q818	B	0
	43	0		C	3.3
	44	4.8		E	0
	45	0			

5-5. WAVEFORMS

A BOARD WAVEFORM



C6 BOARD WAVEFORM

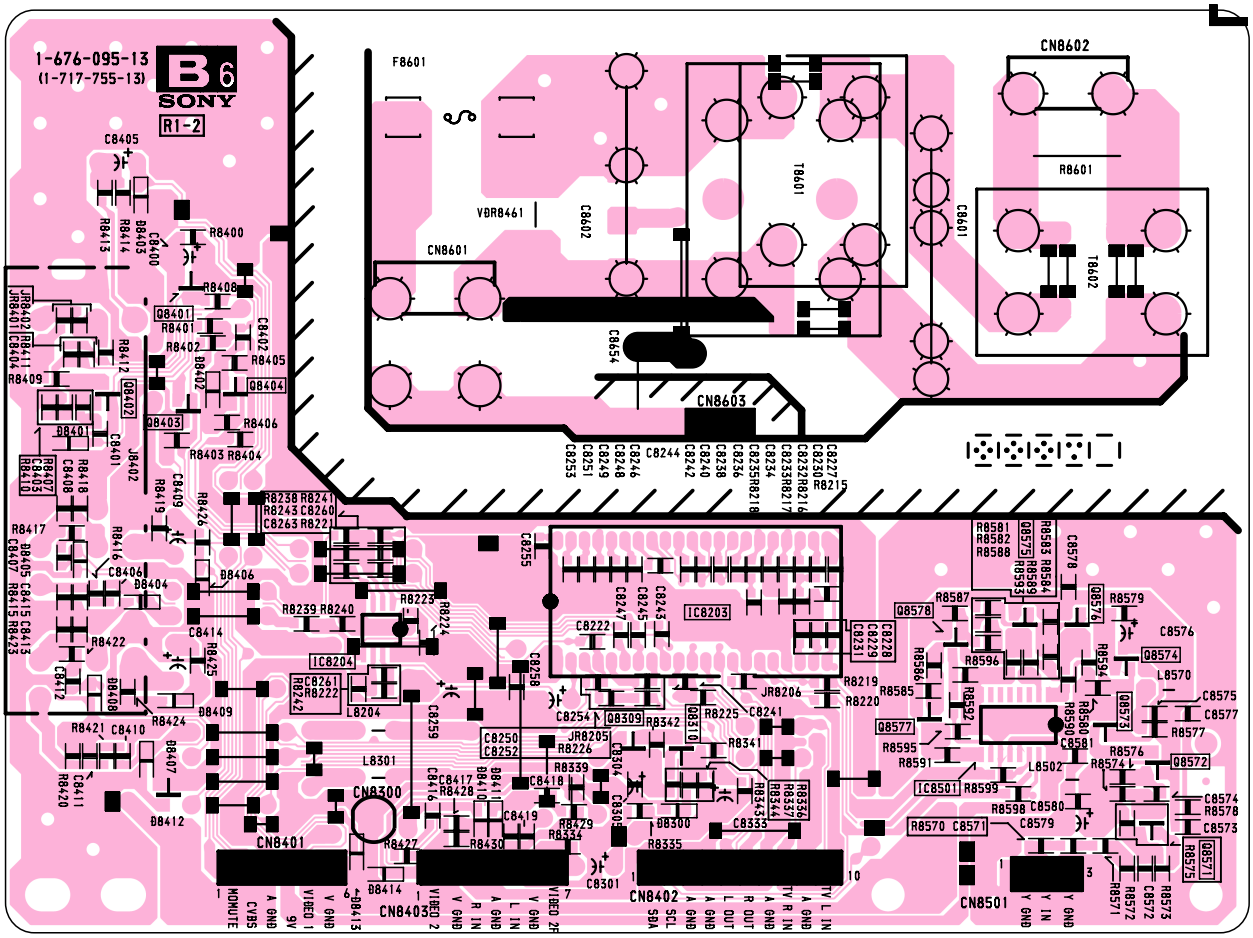


5-6. PRINTED WIRING BOARDS AND PARTS LOCATION

PRINTED WIRING BOARDS

B6 [CISPR, A/C FUSE, AV INPUT, MONITOR INPUT]

– B6 Board –

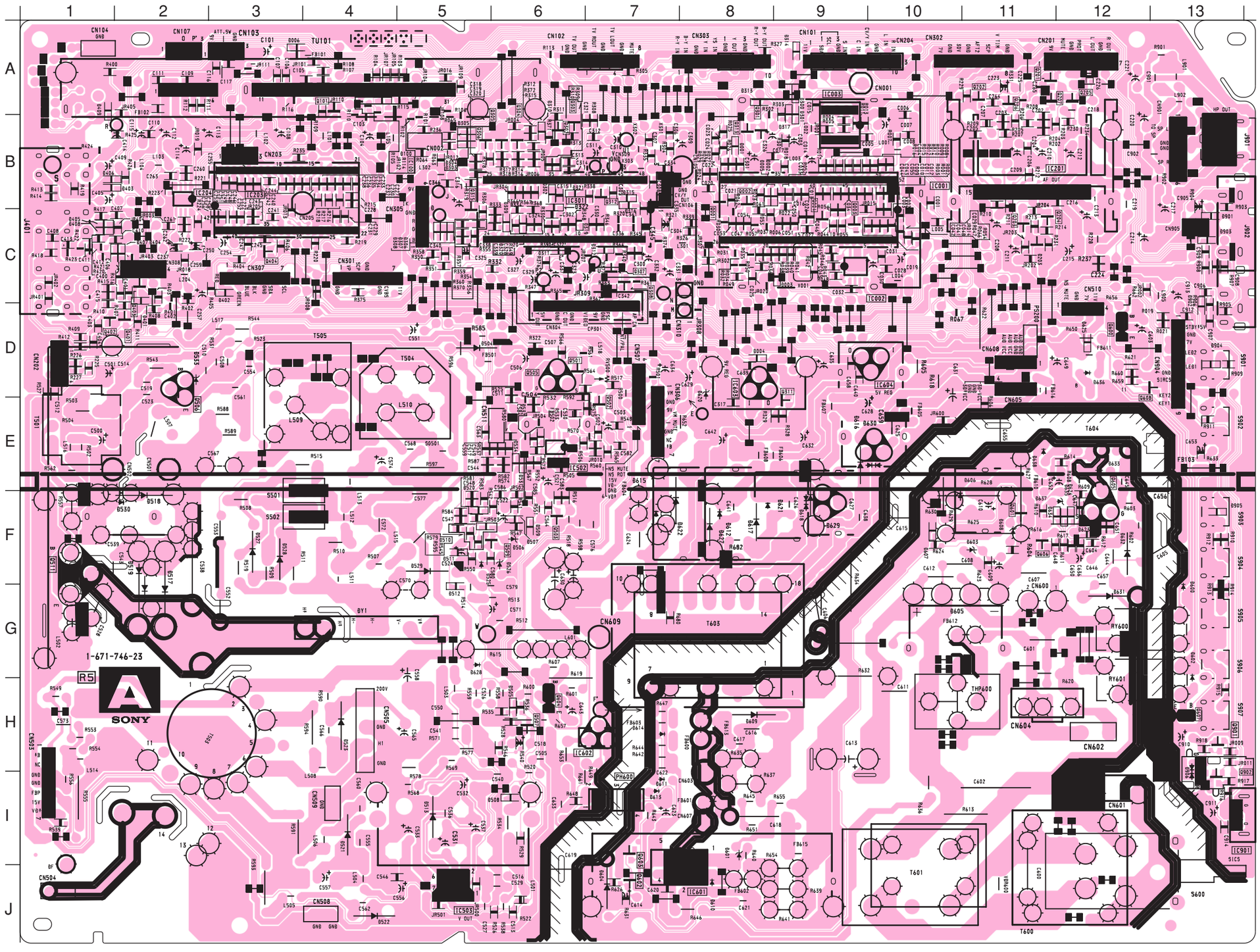


KV-XG29M85
RM-952

PRINTED WIRING BOARDS

A [SYSTEM CONTROLLER, Y/C JUNGLE, DEFLECTION, TUVIF, FRONT AMP, POWER SUPPLY]

– A Board –



NOTE:
The circuit indicated at left contains high voltage of over 1220 Vp-p. Please pay attention when inspecting or repairing it to prevent an electric shock.

A BOARD

IC		DIODE		D601	I-8
				D602	G-13
IC001	B-10	D001	B-8	D603	F-11
IC002	C-10	D002	B-8	D604	J-7
IC003	A-9	D003	C-9	D605	G-10
IC100	B-5	D004	D-8	D606	E-11
IC201	B-11	D006	A-3	D607	F-10
IC203	B-2	D100	B-5	D608	F-11
IC204	B-2	D203	C-11	D609	H-8
IC301	B-6	D300	A-9	D610	J-8
IC502	E-6	D301	B-9	D611	I-7
IC503	J-5	D302	B-6	D612	F-8
IC601	J-8	D303	B-5	D613	I-7
IC602	H-6	D304	B-5	D614	H-7
IC603	D-8	D305	B-5	D615	E-7
IC604	D-10	D306	C-5	D616	E-9
IC901	I-13	D307	C-5	D617	F-8
		D308	C-5	D618	F-8
TRANSISTOR		D309	B-6	D620	D-12
		D310	A-6	D621	F-9
		D311	C-6	D622	F-8
Q001	C-8	D312	C-7	D623	F-12
Q002	B-8	D313	A-8	D624	E-12
Q003	B-9	D315	B-7	D625	D-12
Q004	B-9	D316	C-7	D627	F-8
Q101	B-4	D317	B-9	D628	G-5
Q201	A-11	D319	C-7	D629	F-9
Q202	A-11	D320	C-6	D630	E-9
Q203	C-11	D321	B-6	D631	G-12
Q204	C-12	D322	B-6	D632	F-12
Q205	A-12	D401	D-2	D633	E-12
Q206	A-11	D402	C-3	D634	F-11
Q207	A-12	D403	B-2	D635	E-12
Q301	A-8	D404	C-2	D636	D-12
Q302	B-6	D405	C-1	D637	F-11
Q303	A-6	D406	B-1	D638	E-11
Q304	A-6	D407	C-2	D901	C-13
Q305	A-6	D408	C-1	D902	C-13
Q306	B-5	D409	A-1	D903	C-13
Q307	C-7	D504	D-5	D904	D-13
Q308	C-7	D505	H-6	D905	F-13
Q312	B-7	D506	F-6	D906	H-13
Q313	B-8	D507	F-6		
Q315	B-5	D508	I-5		
Q401	D-2	D509	F-6		
Q402	D-1	D510	F-5		
Q403	D-2	D511	F-5		
Q404	C-3	D512	G-5		
Q501	D-6	D513	I-5		
Q502	E-7	D517	F-2		
Q503	F-6	D518	F-2		
Q505	D-6	D519	F-2		
Q506	E-2	D520	E-5		
Q507	H-6	D521	I-4		
Q509	F-6	D522	J-4		
Q511	F-1	D523	H-4		
Q600	D-12	D525	F-5		
Q601	F-11	D526	F-6		
Q602	J-7	D527	F-3		
Q603	I-7	D528	F-3		
Q604	H-6	D529	F-5		
Q605	E-12	D530	F-2		
Q606	F-11	D531	E-6		
Q607	H-13	D532	E-6		
Q608	E-12	D533	D-2		
Q901	H-13	D534	E-6		
Q902	H-13	D600	G-13		

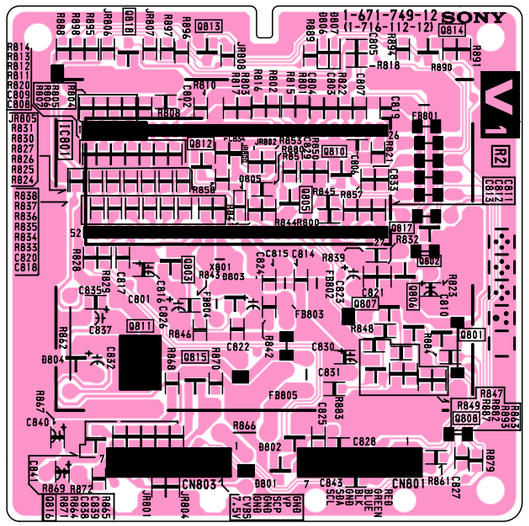
PRINTED WIRING BOARDS

V1 [TELETEXT]

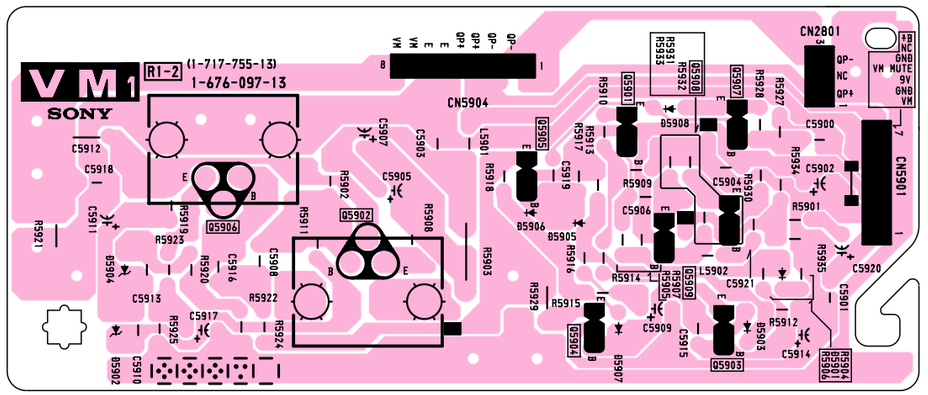
H3 [CONTROL PANEL]

VM1 [VELOCITY MODULATION]

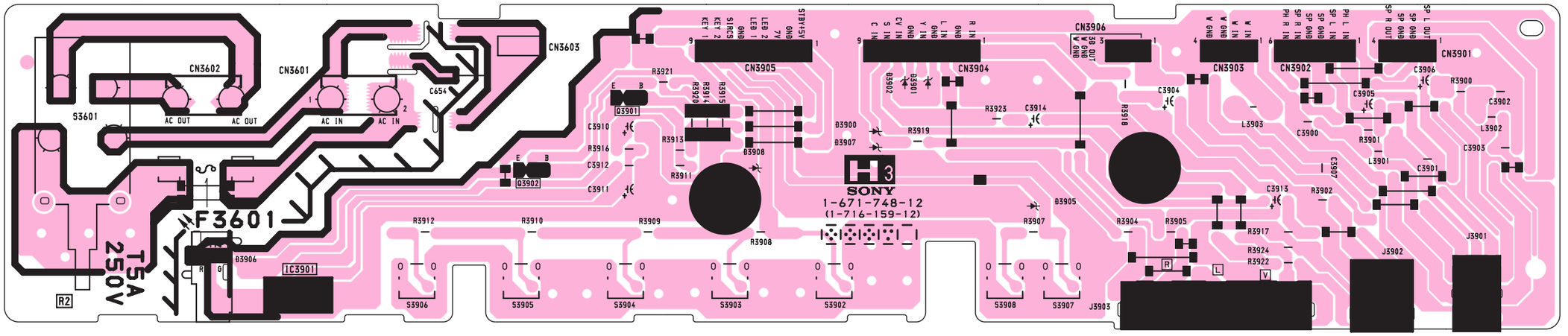
– V1 Board –



– VM1 Board –



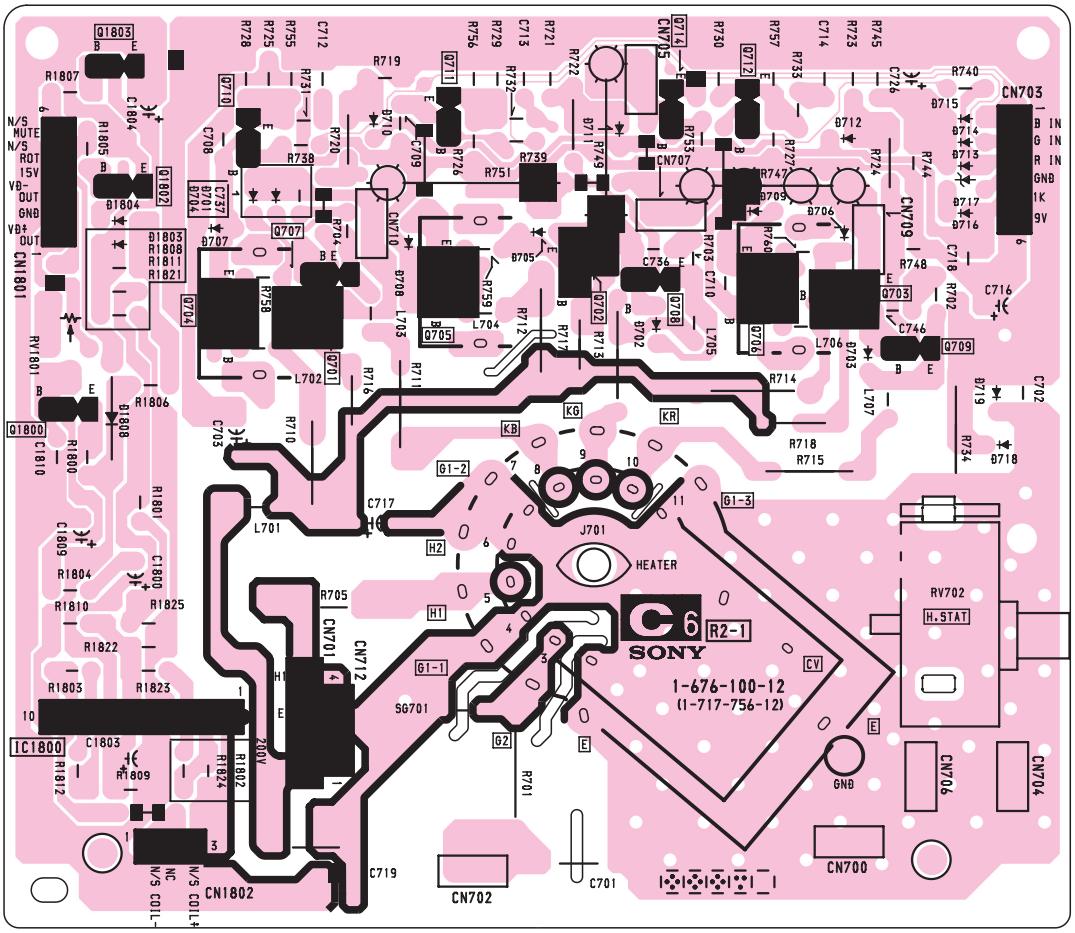
– H3 Board –



PRINTED WIRING BOARDS

C6 [RGB OUT PICTURE ROTATION]

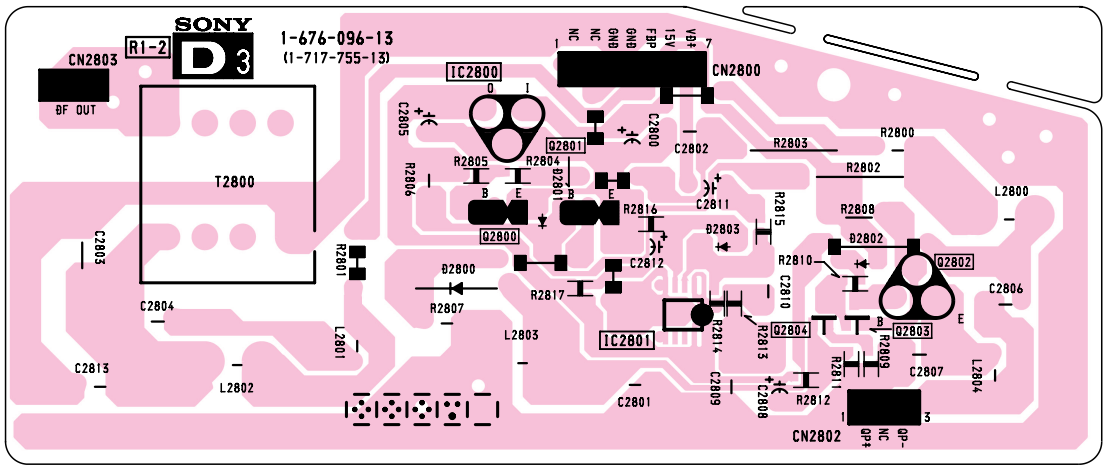
– C6 Board –



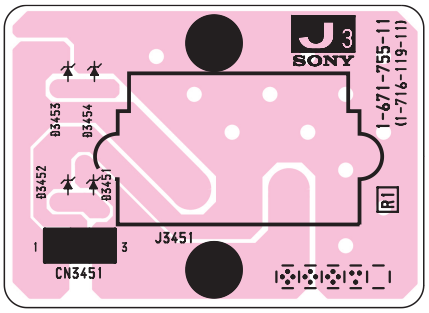
PRINTED WIRING BOARDS

D3 [DQP, DYNAMIC FOCUS] **J3** [3D TERMINAL] **K1** [3D WOOFER]

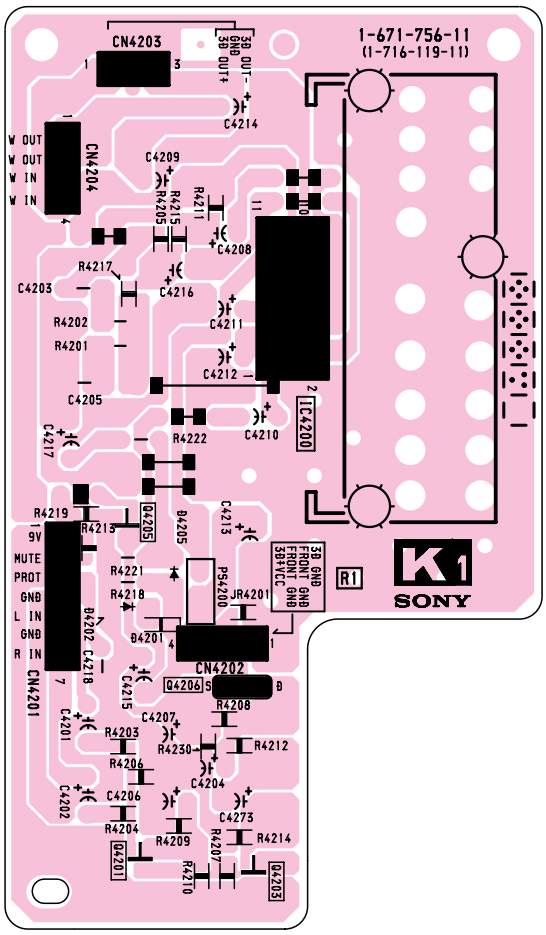
– D3 Board –



– J3 Board –

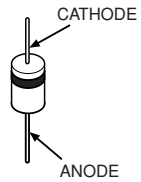
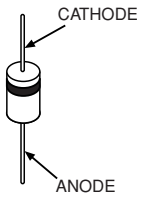
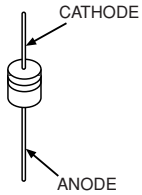
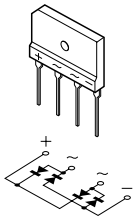
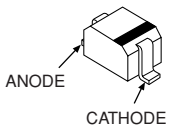
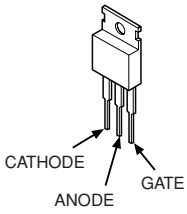


– K1 Board –



5-7. SEMICONDUCTORS

DIODE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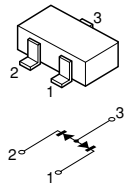
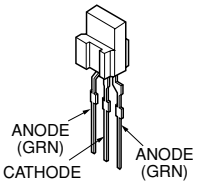
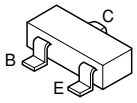
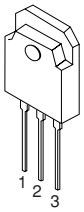
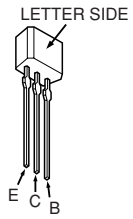
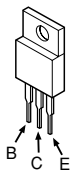
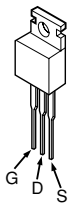
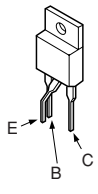
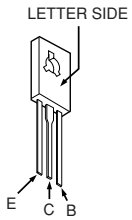
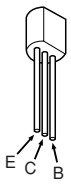
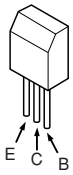
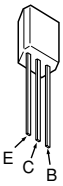
LED TRANSISTOR

					
DA204K DAP202K RD3.3M-B2 RD5.6M-B2	SPB-25MVWF	DTC114EK UN2111 UN2211 UN2213 UN2216 2SA1162-G 2SC1623-L5L6 2SC2712-YG 2SD2114K	2SD2578-CA	DTC144ESA 2SA1175-HFE 2SC2785-HFE	2SA1606-E 2SC4159-E 2SC4793 2SD2394-EF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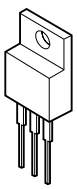
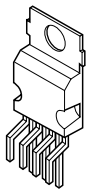
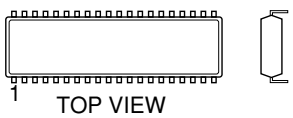
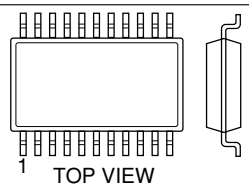
IC

		 Dual In-line Package Pin 6~98	 Single In -line Package Pin 6~98
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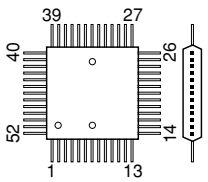
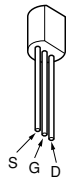
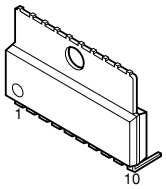
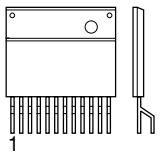
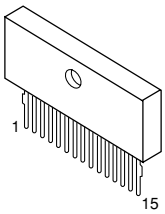
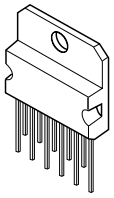
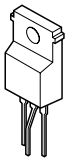
MARKING SIDE VIEW 			MARKING SIDE VIEW  Zig-zag In -line Package Pin 6～99
RU-1P	2SK246-GR	LA6510	STR-F6456S

		
TA8223K	TDA2009A	SE-135N

SECTION 6
EXPLODED VIEWS

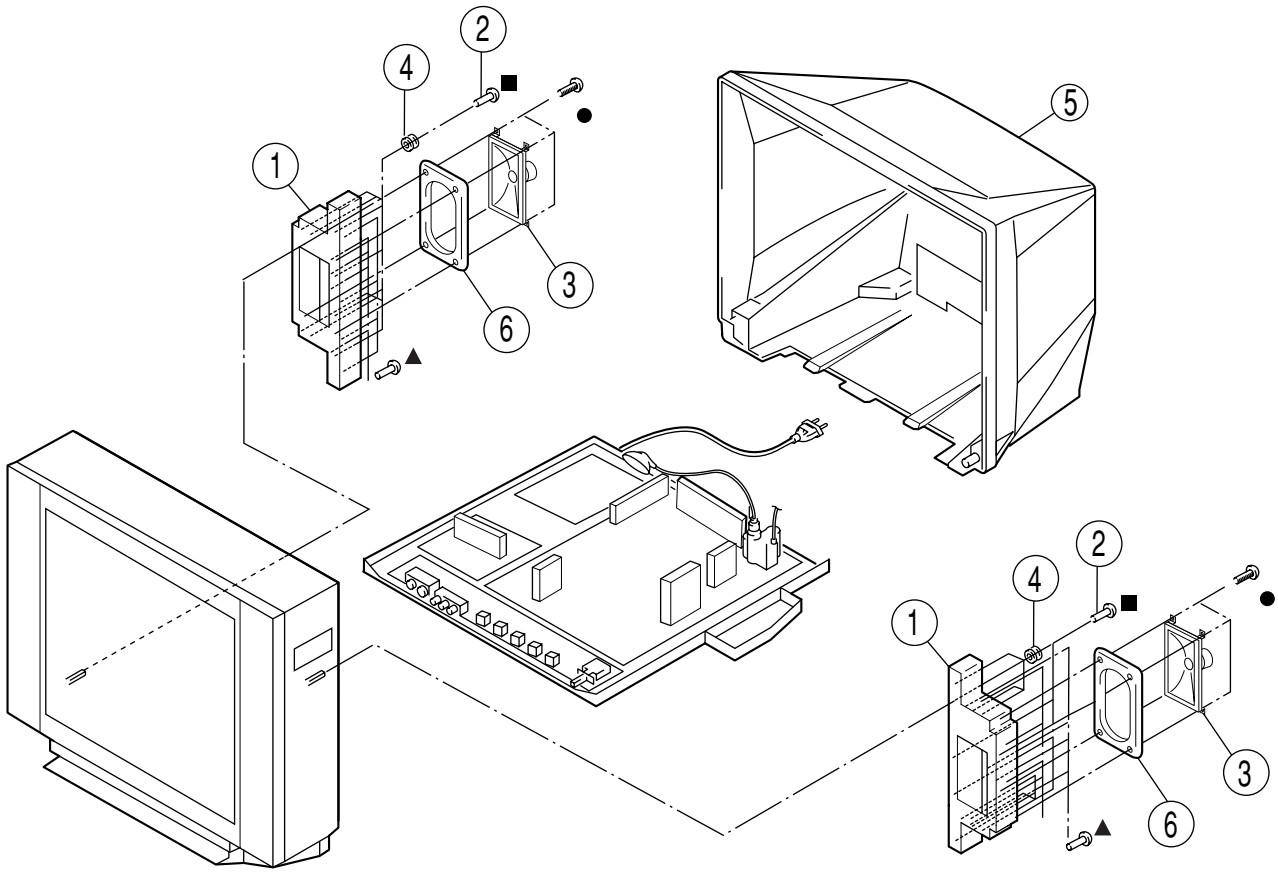
NOTE:

- Items with no part number and no description are not stocked because they are seldom required for routine service.
- The construction parts of an assembled part are indicated with a collation number in the remark column.
- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

The components identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

6-1. SPEAKER BRACKET

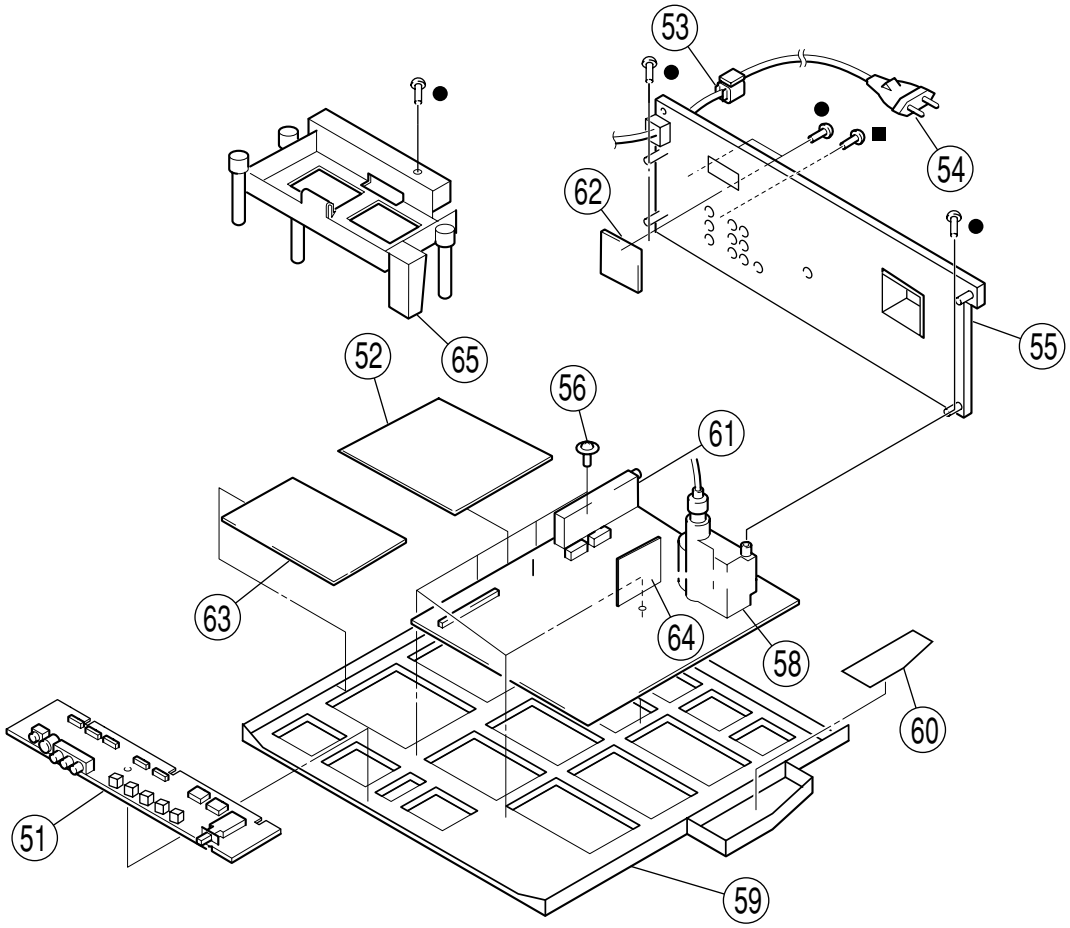
● : 7-685-648-79 SCREW +BVTP 3 × 12
▲ : 7-685-650-79 SCREW +BVTP 3 × 16
■ : 7-685-663-71 SCREW +BVTP 4 × 16



REF. NO.	PART NO.	DESCRIPTION	REMARK
1	* 4-071-045-02	BRACKET SPEAKER	
2	4-054-981-02	SCREW, STEP TAPPING	
3	1-529-563-11	SPEAKER (15 X 6.5CM)	
4	* 4-379-189-11	CUSHION, SPEAKER	
5	⚠ 4-065-506-05	COVER, REAR	(■ 11 SCREWS)
6	* 4-069-797-01	CUSHION, SPEAKER (S)	

6-2. CHASSIS

● : 7-685-648-79 SCREW +BVTP 3 × 12
■ : 7-685-663-71 SCREW +BVTP 4 × 16

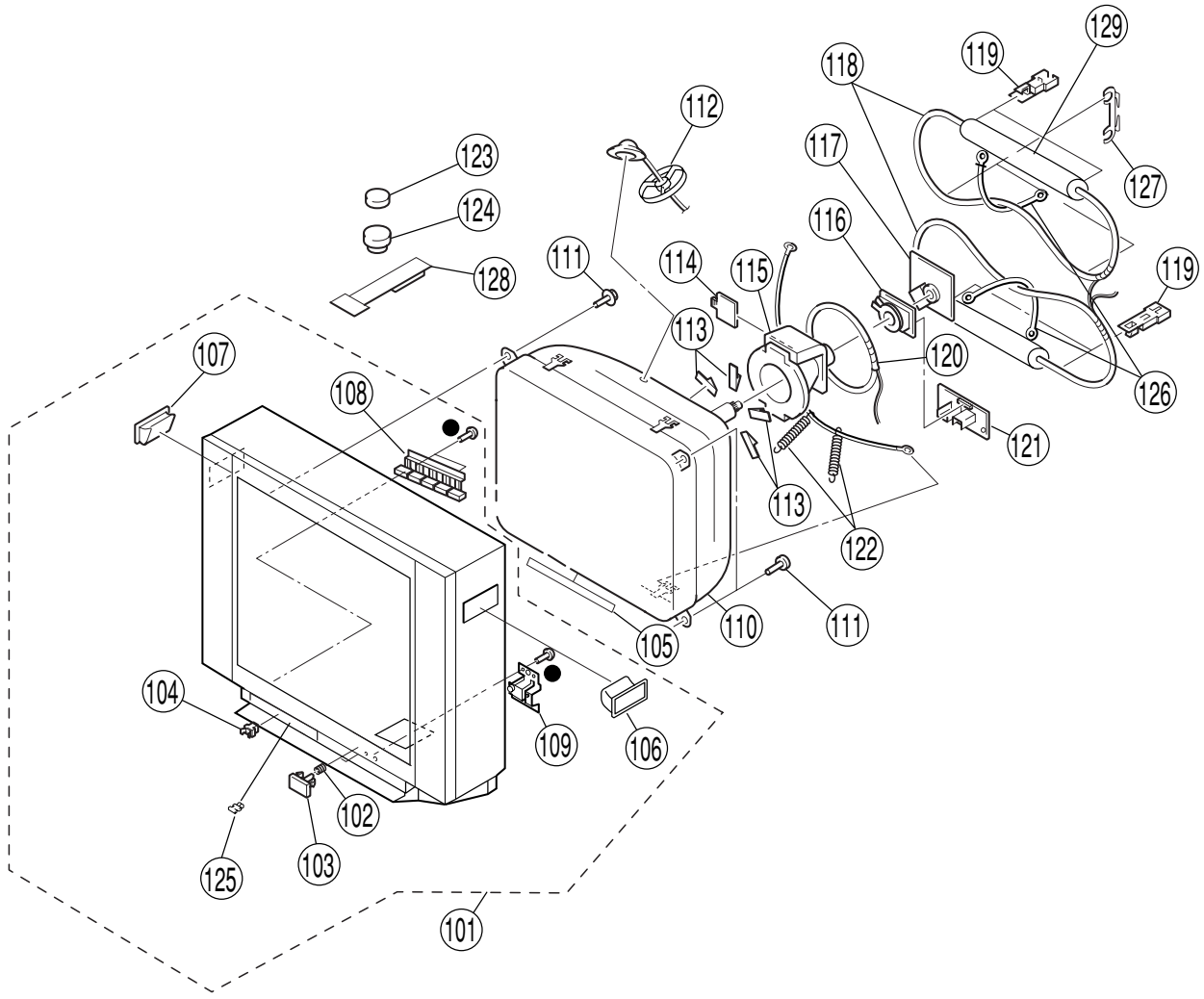


REF. NO.		PART NO.	DESCRIPTION	REMARK
51	*	A-1377-018-A	H3 BOARD MOUNTED	(NOT SUPPLY)
52	*	A-1136-125-A	B6 BOARD COMPLETE	(NOT SUPPLY)
53		4-022-115-00	HOLDER, AC CORD	
54	⚠	1-574-062-11	CORD POWER (WITH CONNECTOR)	
55		4-066-684-12	BRACKET, TERMINAL	
56		4-046-797-01	SCREW (3X12), (+)BVTAP	
57	*	A-1299-557-A	A BOARD COMPLETE	(NOT SUPPLY)
58	⚠	1-453-284-11	TRANSFORMER ASSY, FLYBACK (NX-4009//M314)	

REF. NO.		PART NO.	DESCRIPTION	REMARK
59	*	4-066-681-05	BRACKET, MAIN (7 SCREWS (3X12),(+) BVTAP)	
60	*	A-1343-919-A	D3 BOARD MOUNTED	(NOT SUPPLY)
61		8-598-449-10	TUNER, FSS BTF-LG433	
62	*	A-1388-329-A	J3 BOARD MOUNTED	(NOT SUPPLY)
63	*	A-1380-656-A	K1 BOARD MOUNTED	(NOT SUPPLY)
64	*	A-1347-163-A	V1 BOARD COMPLETE	(NOT SUPPLY)
65	*	4-070-963-01	HOLDER PWB	

6-3. PICTURE TUBE

● : 7-685-648-79 SCREW +BVTP 3 × 12

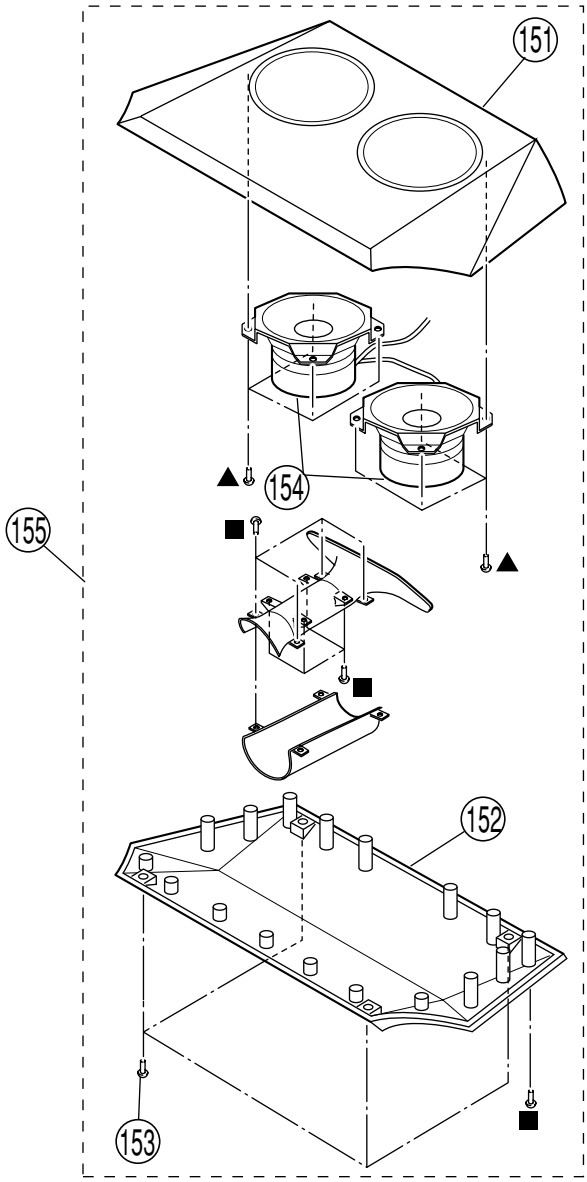


REF. NO.		PART NO.	DESCRIPTION	REMARK
101		X-4039-151-1	BEZNET ASSY	102-104, 106-109, 125
102		4-036-405-11	SPRING, COMPRESSION	
103		4-065-508-01	BUTTON, POWER	
104		4-047-464-01	CATCHER, PUSH	
105		4-072-569-11	SHEET BLOTTING	
106		4-070-957-01	HANDLE (R)	
107		4-070-956-01	HANDLE (L)	
108		4-065-509-01	BUTTON, CONTROL	
109	*	4-065-510-01	GUIDE, LIGHT	
110	⚠	8-735-057-05	PICTURE TUBE (M68LNH070X)	
111		4-046-765-12	SCREW, TAPPING 7+CROWN WASHER	
112	*	3-704-372-11	HOLDER, HV CABLE	
113		4-072-365-02	SPACER, DY	
114		2-163-920-01	PLATE, TLH CONVENGENCE	
115	⚠	8-451-494-31	DEFLECTION YOKE (Y29RSA-S)	

REF. NO.		PART NO.	DESCRIPTION	REMARK
116		8-453-011-41	NA299-C	
117	*	A-1332-094-A	C6 BOARD MOUNTED	(NOT SUPPLY)
118	⚠	1-419-294-11	COIL, DEGAUSING	
119	*	4-062-970-12	CLIP (29RSN),DGC	
120		1-452-896-11	COIL, NA ROTATION (RT200)	
121	*	A-1342-566-A	VM1 BOARD MOUNTED	(NOT SUPPLY)
122		4-369-318-61	SPRING, TENSION	
123		1-452-032-00	MAGNET, DISC	
124		1-452-094-00	CIRCULAR DISC MAGNET B	
125		4-032-761-01	SHAFT (S), DOOR	
126		4-079-376-01	BAND, DGC	
127		4-064-883-03	HOLDER, DGC	
128		X-4387-214-3	PERMALOY ASSY, CORRECTION	
129		4-063-935-21	CUSHION (50 X 550) DGC	

6-4. 3D SPEAKER

▲ : 7-685-661-14 SCREW +BVTP 4 × 12
■ : 7-685-663-71 SCREW +BVTP 4 × 16



REF. NO.	PART NO.	DESCRIPTION	REMARK
151	4-065-515-02	BOX (TP), 3D SPEAKER	
152	4-065-516-01	BOX (BT), 3D SPEAKER	
153	4-302-428-03	SCREW (WASHER HEAD), (+P 3X12)	
154	1-529-172-11	SPEAKER LOUD (10CM)	
155	A-1501-377-D	BOX ASSY, SPEAKER (3D)	

SECTION 8
ELECTRICAL PARTS LIST

A

NOTE:

The components identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

When indicating parts by reference number, please include the board name.

- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.
- All resistors are in ohms
- F : nonflammable

CAPACITORS
- UF : μF, PF : μμF

COILS
- MMH : mH, UH : μH

REF NO.	PART NO.	DESCRIPTION			REMARK
*	A-1299-557-A	A BOARD COMPLETE **********			(NOT SUPPLY)
	4-382-854-11	SCREW (M3X10), P, SW (+)			
	4-382-854-21	SCREW (M3X14), P, SW (+)			
		<CAPACITOR>			
C004	1-163-001-51	CERAMIC CHIP	220PF	10%	50V
C005	1-163-001-51	CERAMIC CHIP	220PF	10%	50V
C006	1-164-004-51	CERAMIC CHIP	0.1UF	10.00%	25V
C007	1-126-947-11	ELECT	47UF	20.00%	16V
C013	1-164-232-11	CERAMIC CHIP	0.01UF	10.00%	50V
C014	1-126-947-11	ELECT	47UF	20.00%	25V
C015	1-163-009-11	CERAMIC CHIP	0.001UF	10.00%	50V
C016	1-163-243-11	CERAMIC CHIP	47PF	5.00%	50V
C017	1-163-113-00	CERAMIC CHIP	68PF	10%	50V
C019	1-126-947-11	ELECT	47UF	20.00%	25V
C022	1-163-227-51	CERAMIC CHIP	10PF	0.50PF	50V
C023	1-163-227-51	CERAMIC CHIP	10PF	0.50PF	50V
C024	1-163-227-51	CERAMIC CHIP	10PF	0.50PF	50V
C026	1-164-004-51	CERAMIC CHIP	0.1UF	10.00%	25V
C027	1-164-004-51	CERAMIC CHIP	0.1UF	10.00%	25V
C028	1-163-037-11	CERAMIC CHIP	0.022UF	10.00%	50V
C030	1-126-965-11	ELECT	22UF	20.00%	50V
C031	1-164-004-51	CERAMIC CHIP	0.1UF	10.00%	25V
C032	1-107-823-51	CERAMIC CHIP	470000PF	10%	16V
C034	1-163-031-11	CERAMIC CHIP	0.01UF		50V
C041	1-163-251-11	CERAMIC CHIP	100PF	5.00%	50V
C042	1-163-251-11	CERAMIC CHIP	100PF	5.00%	50V
C044	1-163-251-11	CERAMIC CHIP	100PF	5.00%	50V
C047	1-163-251-11	CERAMIC CHIP	100PF	5.00%	50V
C055	1-163-251-11	CERAMIC CHIP	100PF	5.00%	50V
C103	1-164-004-51	CERAMIC CHIP	0.1UF	10.00%	25V
C104	1-104-665-11	ELECT	100UF	20.00%	10V
C107	1-163-005-51	CERAMIC CHIP	470PF	10%	50V
C108	1-126-947-11	ELECT	47UF	20.00%	16V
C109	1-163-005-51	CERAMIC CHIP	470PF	10%	50V
C110	1-163-005-51	CERAMIC CHIP	470PF	10%	50V
C111	1-163-005-51	CERAMIC CHIP	470PF	10%	50V
C112	1-126-947-11	ELECT	47UF	20.00%	16V
C113	1-126-947-11	ELECT	47UF	20.00%	25V
C114	1-126-967-11	ELECT	47UF	20.00%	50V
C202	1-104-760-51	CERAMIC CHIP	0.047UF	10.00%	50V
C203	1-104-760-51	CERAMIC CHIP	0.047UF	10.00%	50V
C204	1-137-194-51	FILM	0.47UF	5.00%	50V
C205	1-163-001-51	CERAMIC CHIP	220PF	10%	50V
C206	1-163-001-51	CERAMIC CHIP	220PF	10%	50V
C207	1-137-194-51	FILM	0.47UF	5.00%	50V
C208	1-126-967-11	ELECT	47UF	20.00%	50V
C209	1-126-967-11	ELECT	47UF	20.00%	50V

REF NO.	PART NO.	DESCRIPTION			REMARK
C210	1-126-933-11	ELECT	100UF	20.00%	16V
C211	1-126-941-11	ELECT	470UF	20.00%	25V
C212	1-126-933-11	ELECT	100UF	20.00%	16V
C213	1-126-933-11	ELECT	100UF	20.00%	16V
C214	1-126-942-61	ELECT	1000UF	20.00%	25V
C215	1-126-942-61	ELECT	1000UF	20.00%	25V
C216	1-164-232-11	CERAMIC CHIP	0.01UF	10.00%	50V
C217	1-126-964-51	ELECT	10UF	20.00%	50V
C218	1-136-167-00	FILM	0.15UF	5.00%	50V
C219	1-136-167-00	FILM	0.15UF	5.00%	50V
C220	1-126-942-61	ELECT	1000UF	20.00%	25V
C221	1-126-964-51	ELECT	10UF	20.00%	50V
C223	1-126-965-11	ELECT	22UF	20.00%	50V
C224	1-163-133-00	CERAMIC CHIP	470PF	10%	50V
C225	1-109-982-51	CERAMIC CHIP	1UF	10.00%	10V
C226	1-109-982-51	CERAMIC CHIP	1UF	10.00%	10V
C264	1-164-505-51	CERAMIC CHIP	2.2UF	10%	16V
C265	1-164-505-51	CERAMIC CHIP	2.2UF	10%	16V
C301	1-126-935-11	ELECT	470UF	20.00%	16V
C302	1-163-005-51	CERAMIC CHIP	470PF	10%	50V
C303	1-126-964-51	ELECT	10UF	20.00%	50V
C304	1-126-967-11	ELECT	47UF	20.00%	50V
C305	1-164-004-51	CERAMIC CHIP	0.1UF	10.00%	25V
C306	1-163-233-51	CERAMIC CHIP	18PF	5.00%	50V
C307	1-163-233-51	CERAMIC CHIP	18PF	5.00%	50V
C308	1-163-125-00	CERAMIC CHIP	220PF	5.00%	50V
C309	1-137-378-11	MYLAR	0.22UF	5.00%	50V
C310	1-126-963-11	ELECT	4.7UF	20.00%	50V
C311	1-126-964-11	ELECT	10UF	20.00%	50V
C312	1-164-346-51	CERAMIC CHIP	1UF	10%	16V
C313	1-164-346-51	CERAMIC CHIP	1UF	10%	16V
C315	1-164-004-51	CERAMIC CHIP	0.1UF	10.00%	25V
C316	1-126-934-11	ELECT	220UF	20.00%	16V
C317	1-164-004-51	CERAMIC CHIP	0.1UF	10.00%	25V
C318	1-163-031-11	CERAMIC CHIP	0.01UF		50V
C319	1-163-031-11	CERAMIC CHIP	0.01UF		50V
C320	1-163-031-11	CERAMIC CHIP	0.01UF		50V
C322	1-163-005-51	CERAMIC CHIP	470PF	10%	50V
C323	1-126-965-11	ELECT	22UF	20.00%	50V
C324	1-163-017-00	CERAMIC CHIP	0.0047UF	10.00%	50V
C325	1-126-960-11	ELECT	1UF	20.00%	50V
C327	1-126-965-11	ELECT	22UF	20.00%	50V
C328	1-164-004-51	CERAMIC CHIP	0.1UF	10.00%	25V
C329	1-126-965-11	ELECT	22UF	20.00%	50V
C330	1-164-004-51	CERAMIC CHIP	0.1UF	10.00%	25V
C331	1-126-963-11	ELECT	4.7UF	20.00%	50V
C332	1-126-963-11	ELECT	4.7UF	20.00%	50V
C335	1-164-004-51	CERAMIC CHIP	0.1UF	10.00%	25V
C336	1-164-004-51	CERAMIC CHIP	0.1UF	10.00%	25V
C337	1-126-961-11	ELECT	2.2UF	20.00%	50V
C338	1-163-017-00	CERAMIC CHIP	0.0047UF	10.00%	50V
C341	1-115-340-51	CERAMIC CHIP	0.22UF	10.00%	25V

The components identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

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REF NO.		PART NO.	DESCRIPTION		REMARK	
C342		1-163-125-00	CERAMIC CHIP	220PF	5.00%	50V
C502		1-163-145-00	CERAMIC CHIP	0.0015UF	5.00%	50V
C503		1-126-964-51	ELECT	10UF	20.00%	50V
C506		1-107-638-11	ELECT	33UF	20.00%	160V
C507		1-161-830-00	CERAMIC	0.0047UF		500V
C510		1-102-112-00	CERAMIC	330PF	10.00%	50V
C512		1-163-989-51	CERAMIC CHIP	0.033UF	10.00%	25V
C513		1-163-263-51	CERAMIC CHIP	330PF	10%	50V
C514		1-107-368-11	MYLAR	0.047UF	99%	200V
C517		1-164-182-11	CERAMIC CHIP	3300PF	10%	50V
C518		1-104-665-11	ELECT	100UF	20.00%	10V
C519		1-102-212-00	CERAMIC	820PF	10.00%	500V
C521		1-126-934-11	ELECT	220UF	20.00%	16V
C522		1-126-933-11	ELECT	100UF	20.00%	16V
C523		1-102-002-00	CERAMIC	680PF	10.00%	500V
C524		1-126-967-11	ELECT	47UF	20.00%	50V
C526		1-130-495-00	MYLAR	0.1UF	5.00%	50V
C527		1-102-820-00	CERAMIC	330PF	5.00%	50V
C528		1-162-116-00	CERAMIC	680PF	10.00%	2KV
C530		1-137-372-11	MYLAR	0.022UF	5.00%	50V
C531		1-107-903-11	ELECT	2.2UF	20.00%	50V
C532		1-126-941-11	ELECT	470UF	20.00%	25V
C533		1-126-941-11	ELECT	470UF	20.00%	25V
C536		1-136-165-00	FILM	0.1UF	5.00%	50V
C537		1-126-969-11	ELECT	220UF	20.00%	50V
C538		1-127-717-11	FILM	19000PF	3%	1.2KV
C539		1-129-723-00	FILM	0.056UF	5.00%	630V
C540		1-136-171-00	FILM	0.33UF	5.00%	50V
C546		1-165-319-11	CERAMIC CHIP	0.1UF		50V
C549		1-163-017-00	CERAMIC CHIP	0.0047UF	10.00%	50V
C550		1-106-220-00	MYLAR	0.1UF	10.00%	100V
C551		1-126-960-11	ELECT	1UF	20.00%	50V
C552		1-162-116-00	CERAMIC	680PF	10.00%	2KV
C553		1-162-116-00	CERAMIC	680PF	10.00%	2KV
C554		1-137-417-11	MYLAR	0.0047UF	10.00%	200V
C556		1-126-941-11	ELECT	470UF	20.00%	25V
C557		1-126-941-11	ELECT	470UF	20.00%	25V
C558		1-123-024-21	ELECT	33UF		160V
C560		1-102-228-00	CERAMIC	470PF	10.00%	500V
C561		1-129-898-00	FILM	0.0022UF	5.00%	630V
C562		1-102-228-00	CERAMIC	470PF	10.00%	500V
C564		1-163-038-00	CERAMIC CHIP	0.1UF		25V
C565		1-107-655-11	ELECT	47UF	20.00%	250V
C566		1-102-244-00	CERAMIC	220PF	10.00%	500V
C567		1-115-520-11	FILM	0.68UF	5.00%	250V
C568		1-102-228-00	CERAMIC	470PF	10.00%	500V
C570		1-115-522-11	FILM	1UF	5.00%	250V
C572		1-117-661-21	FILM	0.15UF	5.00%	250V
C573		1-106-387-00	MYLAR	0.068UF	10.00%	200V
C574		1-104-709-11	ELECT	4.7UF		160V
C576		1-130-495-00	MYLAR	0.1UF	5.00%	50V
C577		1-106-395-00	MYLAR	0.15UF	10.00%	200V
C582		1-164-004-51	CERAMIC CHIP	0.1UF	10.00%	25V
C584		1-163-251-11	CERAMIC CHIP	100PF	5.00%	50V
C586		1-163-251-11	CERAMIC CHIP	100PF	5.00%	50V
C600	⚠	1-104-705-11	MYLAR	0.1UF	20.00%	250V
C602	⚠	1-104-705-11	MYLAR	0.1UF	20.00%	250V
C603		1-126-947-11	ELECT	47UF	20.00%	25V
C604		1-163-009-11	CERAMIC CHIP	0.001UF	10.00%	50V
C605	⚠	1-119-886-51	CERAMIC	470PF	10.00%	250V
C606	⚠	1-119-886-51	CERAMIC	470PF	10.00%	250V
C607		1-161-830-00	CERAMIC	0.0047UF	99%	500V

REF NO.		PART NO.	DESCRIPTION		REMARK	
C608		1-161-830-00	CERAMIC	0.0047UF	99%	500V
C609		1-126-968-11	ELECT	100UF	20.00%	50V
C610		1-126-964-51	ELECT	10UF	20.00%	50V
C611		1-161-830-00	CERAMIC	0.0047UF	99%	500V
C612		1-161-830-00	CERAMIC	0.0047UF	99%	500V
C613		1-125-906-11	ELECT	560UF	20.00%	450V
C614		1-126-964-51	ELECT	10UF	20.00%	50V
C615	⚠	1-119-886-51	CERAMIC	470PF	10.00%	250V
C616		1-130-202-00	FILM	0.022UF	5.00%	400V
C617		1-107-792-41	CERAMIC	100PF	5.00%	1KV
C618		1-125-893-11	FILM	680PF	3.00%	1.5KV
C619	⚠	1-119-886-51	CERAMIC	470PF	10.00%	250V
C620		1-163-133-00	CERAMIC CHIP	470PF	10%	50V
C621		1-102-114-00	CERAMIC	470PF	10.00%	50V
C622		1-102-119-00	CERAMIC	0.0015UF	10.00%	50V
C623		1-104-665-11	ELECT	100UF	20.00%	25V
C624		1-125-772-51	CERAMIC	1500PF	10.00%	2KV
C625		1-102-002-00	CERAMIC	680PF	10.00%	500V
C626		1-102-002-00	CERAMIC	680PF	10.00%	500V
C627		1-102-002-00	CERAMIC	680PF	10.00%	500V
C628		1-126-952-11	ELECT	1000UF	20.00%	35V
C629		1-126-964-51	ELECT	10UF	20.00%	50V
C630		1-125-494-11	ELECT(BLOCK)	560UF	20.00%	160V
C631		1-128-550-11	ELECT	2200UF	20.00%	50V
C632		1-128-339-11	ELECT	2200UF	20.00%	16V
C633		1-104-999-11	MYLAR	0.1UF	10.00%	200V
C634		1-126-933-11	ELECT	100UF	20.00%	16V
C635		1-104-665-11	ELECT	100UF	20.00%	10V
C636		1-104-760-51	CERAMIC CHIP	0.047UF	10.00%	50V
C641		1-102-002-00	CERAMIC	680PF	10.00%	500V
C642		1-126-943-11	ELECT	2200UF	20.00%	25V
C643		1-104-665-11	ELECT	100UF	20.00%	10V
C644		1-104-331-11	CERAMIC	0.0022UF	10.00%	1KV
C645		1-137-605-11	MYLAR	0.01UF	10.00%	250V
C646		1-107-679-41	ELECT	10UF	20.00%	450V
C647		1-163-275-11	CERAMIC CHIP	0.001UF	5.00%	50V
C649		1-126-940-11	ELECT	330UF	20.00%	25V
C650		1-163-275-11	CERAMIC CHIP	0.001UF	5.00%	50V
C651		1-163-133-00	CERAMIC CHIP	470PF	10%	50V
C652		1-126-965-11	ELECT	22UF	20.00%	50V
C653		1-126-947-11	ELECT	47UF	20.00%	25V
C655	⚠	1-119-886-51	CERAMIC	470PF	10.00%	250V
C657		1-101-821-00	CERAMIC	0.0022UF		500V
C901		1-136-153-00	FILM	0.01UF	5.00%	50V
C902		1-136-153-00	FILM	0.01UF	5.00%	50V
C912		1-164-004-51	CERAMIC CHIP	0.1UF	10.00%	25V
C913		1-104-665-11	ELECT	100UF	20.00%	10V

<CONNECTOR>

CN101	*	1-764-333-11	PLUG, CONNECTOR 10P
CN102		1-564-507-11	PLUG, CONNECTOR 4P
CN104		1-695-915-11	TAB (CONTACT)
CN106		1-564-506-11	PLUG, CONNECTOR 3P
CN201	*	1-564-510-11	PLUG, CONNECTOR 7P
CN202	*	1-508-847-00	PIN, CONNECTOR 4P
CN301	*	1-774-813-11	CONNECTOR, BOARD TO BOARD 7P
CN303		1-564-506-11	PLUG, CONNECTOR 3P
CN305		1-564-509-11	PLUG, CONNECTOR 6P
CN307	*	1-774-813-11	CONNECTOR, BOARD TO BOARD 7P
CN501	*	1-508-784-21	PIN, CONNECTOR (5MM PITCH) 1P
CN502	*	1-508-784-21	PIN, CONNECTOR (5MM PITCH) 1P

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REF NO.		PART NO.	DESCRIPTION			REMARK
CN503	*	1-564-510-11	PLUG, CONNECTOR 7P			
CN504		1-695-915-11	TAB (CONTACT)			
CN505		1-508-766-00	PIN, CONNECTOR (5MM PITCH) 4P			
CN601		1-580-843-11	PIN, CONNECTOR (POWER)			
CN602	*	1-508-786-00	PIN, CONNECTOR (5MM PITCH) 2P			
CN603	*	1-508-784-21	PIN, CONNECTOR (5MM PITCH) 1P			
CN604	*	1-573-963-11	PIN, CONNECTOR (PC BOARD) 3P			
CN605		1-564-507-11	PLUG, CONNECTOR 4P			
CN901		1-564-509-11	PLUG, CONNECTOR 6P			
CN904	*	1-564-512-11	PLUG, CONNECTOR 9P			
			<COMPOSITION CIRCUIT BLOCK>			
CP301		1-418-807-11	FILTER BLOCK, COMB			
			<DIODE>			
D001		8-719-988-61	1SS355TE-17			
D005		8-719-988-61	1SS355TE-17			
D006		8-719-988-61	1SS355TE-17			
D203		8-719-914-42	DA204K			
D300		1-216-295-61	SHORT CHIP	0		
D301		8-719-988-61	1SS355TE-17			
D306		8-719-988-61	1SS355TE-17			
D307		8-719-988-61	1SS355TE-17			
D308		8-719-988-61	1SS355TE-17			
D309		8-719-069-54	UDZSTE-175.1B			
D311		8-719-988-61	1SS355TE-17			
D312		8-719-988-61	1SS355TE-17			
D313		8-719-988-61	1SS355TE-17			
D314		8-719-988-61	1SS355TE-17			
D315		8-719-988-61	1SS355TE-17			
D316		8-719-056-84	UDZ-TE-17-7.5B			
D320		8-719-069-60	UDZSTE-179.1B			
D321		8-719-069-60	UDZSTE-179.1B			
D504		8-719-302-43	EL1Z			
D505		8-719-988-61	1SS355TE-17			
D506		8-719-911-19	1SS119-25			
D507		8-719-988-61	1SS355TE-17			
D508		8-719-988-61	1SS355TE-17			
D509		1-216-073-61	RES-CHIP	10K	5%	1/10W
D510		8-719-988-61	1SS355TE-17			
D511		8-719-988-61	1SS355TE-17			
D512		8-719-988-61	1SS355TE-17			
D513		8-719-908-03	GP08D			
D517		8-719-312-71	RS3FS			
D518		8-719-074-35	RU4AM-T4			
D519		8-719-312-71	RS3FS			
D521		8-719-302-43	EL1Z			
D522		8-719-028-45	D2L20U			
D523		8-719-302-43	EL1Z			
D527		8-719-908-03	GP08D			
D528		8-719-908-03	GP08D			
D531		8-719-988-61	1SS355TE-17			
D532		8-719-988-61	1SS355TE-17			
D534		8-719-988-61	1SS355TE-17			
D600		8-719-911-19	1SS119-25			
D602		8-719-911-19	1SS119-25			
D603		8-719-150-92	RD33EB3T			
D604		8-719-028-72	RGP02-17EL-6433			
D605		8-719-510-22	D3SB60			
D606		8-719-108-18	5P-6M			

REF NO.		PART NO.	DESCRIPTION			REMARK
D607		8-719-404-50	MA111-TX			
D608		8-719-110-53	RD20ES-B2			
D609		8-719-311-31	RU-1P			
D610		8-719-043-76	AK04V0			
D611		8-719-046-74	AU-01Z-V1			
D613		8-719-046-74	AU-01Z-V1			
D614		8-719-046-74	AU-01Z-V1			
D615		8-719-074-35	RU4AM-T4			
D616		8-719-067-18	RN4Z			
D617		8-719-073-84	31DQ06-FC5			
D618		8-719-067-18	RN4Z			
D620		8-719-110-72	RD30ESB2			
D623		8-719-978-65	DTZ-TT11-15B			
D624		8-719-404-50	MA111-TX			
D625		8-719-977-28	DTZ10B			
D627		8-719-073-84	31DQ06-FC5			
D628		8-719-911-19	1SS119-25			
D628		8-719-991-33	1SS133T-77			
D631		8-719-068-00	ERC04-06SE			
D632		8-719-068-00	ERC04-06SE			
D633		8-719-948-45	ERA22-08			
D634		8-719-404-50	MA111-TX			
D635		8-719-404-50	MA111-TX			
D636		8-719-510-02	D1NS4			
D637		8-719-109-96	RD6.8ES-B1			
D638		8-719-510-48	D1N20R			
			<CONNECTOR>			
DY1	*	1-580-798-11	CONNECTOR PIN (DY) 6P			
			<FERRITE BEAD>			
FB501		1-410-397-21	FERRITE	1.1UH		
FB502		1-410-397-21	FERRITE	1.1UH		
FB600		1-410-397-21	FERRITE	1.1UH		
FB601		1-410-397-21	FERRITE	1.1UH		
FB602		1-410-397-21	FERRITE	1.1UH		
FB603		1-410-397-21	FERRITE	1.1UH		
FB604		1-412-911-31	FERRITE	0UH		
FB605		1-412-911-31	FERRITE	0UH		
FB606		1-412-911-31	FERRITE	0UH		
FB607		1-410-397-21	FERRITE	1.1UH		
FB608		1-412-911-31	FERRITE	0UH		
FB611		1-410-397-21	FERRITE	1.1UH		
FB612		1-410-397-21	FERRITE	1.1UH		
FB613		1-410-397-21	FERRITE	1.1UH		
FB615		1-412-911-31	FERRITE	0UH		
			<IC>			
IC001		8-752-909-63	CXP86449-626S			
IC002		8-759-371-21	MM1319AFBE			
IC003		8-759-672-78	M24C08-BN6(A)			
IC201		8-759-336-30	TA8223K			
IC301		8-752-090-41	CXA2139S			
IC502		8-759-700-07	NJM2903M			
IC503		8-759-980-58	TDA8172			
IC601		8-749-019-09	IC STR-F6456S			
IC602		8-749-920-61	SE-135N			
IC603		8-759-701-59	NJM78M09FA			

The components identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

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REF NO.	PART NO.	DESCRIPTION		REMARK
IC604	8-759-231-53	TA7805S		
		<CHIP CONDUCTOR>		
JR001	1-216-295-61	SHORT CHIP	0	
JR002	1-216-295-61	SHORT CHIP	0	
JR004	1-216-295-61	SHORT CHIP	0	
JR005	1-216-295-61	SHORT CHIP	0	
JR006	1-216-295-61	SHORT CHIP	0	
JR007	1-216-295-61	SHORT CHIP	0	
JR008	1-216-295-61	SHORT CHIP	0	
JR010	1-216-295-61	SHORT CHIP	0	
JR012	1-216-295-61	SHORT CHIP	0	
JR014	1-216-295-61	SHORT CHIP	0	
JR015	1-216-295-61	SHORT CHIP	0	
JR016	1-216-295-61	SHORT CHIP	0	
JR019	1-216-295-61	SHORT CHIP	0	
JR102	1-216-295-61	SHORT CHIP	0	
JR109	1-216-295-61	SHORT CHIP	0	
JR202	1-216-295-61	SHORT CHIP	0	
JR204	1-216-295-61	SHORT CHIP	0	
JR309	1-216-295-61	SHORT CHIP	0	
JR500	1-216-295-61	SHORT CHIP	0	
JR501	1-216-295-61	SHORT CHIP	0	
JR502	1-216-295-61	SHORT CHIP	0	
JR503	1-216-295-61	SHORT CHIP	0	
JR600	1-216-295-61	SHORT CHIP	0	
		<COIL>		
L002	1-414-856-11	INDUCTOR	10UH	
L003	1-414-180-11	INDUCTOR	3.3UH	
L005	1-414-233-22	FERRITE	0UH	
L101	1-414-856-11	INDUCTOR	10UH	
L102	1-414-856-11	INDUCTOR	10UH	
L103	1-414-856-11	INDUCTOR	10UH	
L104	1-414-856-11	INDUCTOR	10UH	
L105	1-414-856-11	INDUCTOR	10UH	
L301	1-414-189-31	INDUCTOR	100UH	
L302	1-414-185-41	INDUCTOR	22UH	
L501	1-412-525-31	INDUCTOR	10UH	
L502	1-422-613-11	COIL, AIR CORE		
L503	1-412-525-31	INDUCTOR	10UH	
L504	1-412-525-31	INDUCTOR	10UH	
L507	1-459-111-00	INDUCTOR	10MH	
L511	1-406-977-71	INDUCTOR	0UH	
L513	1-412-551-31	INDUCTOR	1.5MH	
L515	1-459-104-00	COIL, WITH CORE		
L518	1-414-187-11	INDUCTOR	47UH	
L601	1-412-527-11	INDUCTOR	15UH	
L901	1-408-603-31	INDUCTOR	10UH	
L902	1-408-603-31	INDUCTOR	10UH	
L905	1-414-856-11	INDUCTOR	10UH	
		<PHOTO COUPLER>		
PH600 ⚠	8-749-924-35	ON3171-R		

REF NO.	PART NO.	DESCRIPTION			REMARK
		<IC LINK>			
PS200	1-532-675-21	LINK, IC 1.5A/150V			
		<TRANSISTOR>			
Q002	8-729-230-49	2SC2712-YG			
Q003	8-729-424-08	UN2111			
Q004	8-729-421-22	UN2211			
Q101	8-729-230-49	2SC2712-YG			
Q201	8-729-424-67	UN2216			
Q202	8-729-424-67	UN2216			
Q205	8-729-421-19	UN2213			
Q206	8-729-421-19	UN2213			
Q207	8-729-421-19	UN2213			
Q301	8-729-216-22	2SA1162-G			
Q302	8-729-230-49	2SC2712-YG			
Q303	8-729-216-22	2SA1162-G			
Q304	8-729-216-22	2SA1162-G			
Q305	8-729-216-22	2SA1162-G			
Q306	8-729-216-22	2SA1162-G			
Q307	8-729-230-49	2SC2712-YG			
Q308	8-729-216-22	2SA1162-G			
Q312	8-729-216-22	2SA1162-G			
Q313	8-729-230-49	2SC2712-YG			
Q315	8-729-421-19	UN2213			
Q501	8-729-216-22	2SA1162-G			
Q502	8-729-216-22	2SA1162-G			
Q503	8-729-230-49	2SC2712-YG			
Q505	8-729-931-45	IRF614			
Q506	8-729-119-80	2SC2688-LK			
Q507	8-729-216-22	2SA1162-G			
Q509	8-729-230-49	2SC2712-YG			
Q511	8-729-048-07	2SD2578-CA			
Q600	8-729-119-78	2SC2785-HFE			
Q601	8-729-023-22	2SD2114K			
Q602	8-729-230-49	2SC2712-YG			
Q603	8-729-424-08	UN2111			
Q604	8-729-200-17	2SA1091-O			
Q605	8-729-044-30	2SK2845-LB102			
Q606	8-729-230-49	2SC2712-YG			
Q607	8-729-922-37	2SD2144S-UVW			
Q608	8-729-230-49	2SC2712-YG			
		<RESISTOR>			
R001	1-414-233-22	FERRITE	0UH		
R002	1-216-025-61	RES-CHIP	100	5%	1/10W
R003	1-216-073-61	RES-CHIP	10K	5%	1/10W
R004	1-216-025-61	RES-CHIP	100	5%	1/10W
R005	1-216-025-61	RES-CHIP	100	5%	1/10W
R008	1-216-065-61	RES-CHIP	4.7K	5%	1/10W
R010	1-216-065-61	RES-CHIP	4.7K	5%	1/10W
R011	1-216-065-61	RES-CHIP	4.7K	5%	1/10W
R012	1-216-065-61	RES-CHIP	4.7K	5%	1/10W
R013	1-216-065-61	RES-CHIP	4.7K	5%	1/10W
R014	1-216-025-61	RES-CHIP	100	5%	1/10W
R015	1-216-025-61	RES-CHIP	100	5%	1/10W
R017	1-216-049-61	RES-CHIP	1K	5%	1/10W
R018	1-216-033-61	RES-CHIP	220	5%	1/10W
R019	1-216-073-61	RES-CHIP	10K	5%	1/10W

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REF NO.	PART NO.	DESCRIPTION		REMARK	
R021	1-216-073-61	RES-CHIP	10K	5%	1/10W
R022	1-216-033-61	RES-CHIP	220	5%	1/10W
R024	1-216-063-61	RES-CHIP	3.9K	5%	1/10W
R025	1-216-063-61	RES-CHIP	3.9K	5%	1/10W
R026	1-216-063-61	RES-CHIP	3.9K	5%	1/10W
R027	1-216-073-61	RES-CHIP	10K	5%	1/10W
R029	1-216-049-61	RES-CHIP	1K	5%	1/10W
R031	1-216-049-61	RES-CHIP	1K	5%	1/10W
R034	1-216-049-61	RES-CHIP	1K	5%	1/10W
R035	1-216-025-61	RES-CHIP	100	5%	1/10W
R036	1-216-025-61	RES-CHIP	100	5%	1/10W
R037	1-216-025-61	RES-CHIP	100	5%	1/10W
R040	1-216-025-61	RES-CHIP	100	5%	1/10W
R041	1-216-025-61	RES-CHIP	100	5%	1/10W
R042	1-216-295-61	SHORT CHIP	0		
R043	1-216-049-61	RES-CHIP	1K	5%	1/10W
R044	1-216-025-61	RES-CHIP	100	5%	1/10W
R045	1-414-233-22	FERRITE	0UH		
R046	1-216-049-61	RES-CHIP	1K	5%	1/10W
R047	1-414-233-22	FERRITE	0UH		
R048	1-216-073-61	RES-CHIP	10K	5%	1/10W
R050	1-216-073-61	RES-CHIP	10K	5%	1/10W
R053	1-216-049-61	RES-CHIP	1K	5%	1/10W
R055	1-216-073-61	RES-CHIP	10K	5%	1/10W
R056	1-216-073-61	RES-CHIP	10K	5%	1/10W
R061	1-216-033-61	RES-CHIP	220	5%	1/10W
R062	1-216-041-61	RES-CHIP	470	5%	1/10W
R063	1-216-041-61	RES-CHIP	470	5%	1/10W
R064	1-216-041-61	RES-CHIP	470	5%	1/10W
R065	1-216-041-61	RES-CHIP	470	5%	1/10W
R066	1-216-049-61	RES-CHIP	1K	5%	1/10W
R067	1-216-049-61	RES-CHIP	1K	5%	1/10W
R105	1-216-295-61	SHORT CHIP	0		
R109	1-216-041-61	RES-CHIP	470	5%	1/10W
R111	1-216-025-61	RES-CHIP	100	5%	1/10W
R112	1-216-025-61	RES-CHIP	100	5%	1/10W
R113	1-216-047-00	METAL CHIP	820	5%	1/10W
R202	1-216-051-61	RES-CHIP	1.2K	5%	1/10W
R203	1-216-057-61	RES-CHIP	2.2K	5%	1/10W
R204	1-216-061-00	RES-CHIP	3.3K	5%	1/10W
R205	1-216-061-00	RES-CHIP	3.3K	5%	1/10W
R206	1-216-057-61	RES-CHIP	2.2K	5%	1/10W
R207	1-216-051-61	RES-CHIP	1.2K	5%	1/10W
R208	1-216-065-61	RES-CHIP	4.7K	5%	1/10W
R209	1-216-065-61	RES-CHIP	4.7K	5%	1/10W
R210	1-216-031-61	RES-CHIP	180	5%	1/10W
R212	1-216-031-61	RES-CHIP	180	5%	1/10W
R225	1-216-033-61	RES-CHIP	220	5%	1/10W
R226	1-216-033-61	RES-CHIP	220	5%	1/10W
R227	1-216-033-61	RES-CHIP	220	5%	1/10W
R228	1-249-389-11	CARBON	4.7	5%	1/4W
R229	1-216-073-61	RES-CHIP	10K	5%	1/10W
R230	1-216-069-61	RES-CHIP	6.8K	5%	1/10W
R231	1-216-295-61	SHORT CHIP	0		
R234	1-249-389-11	CARBON	4.7	5%	1/4W
R237	1-216-308-61	METAL CHIP	4.7	5%	1/10W
R301	1-216-073-61	RES-CHIP	10K	5%	1/10W
R302	1-216-295-61	SHORT CHIP	0		
R303	1-216-049-61	RES-CHIP	1K	5%	1/10W
R304	1-216-073-61	RES-CHIP	10K	5%	1/10W
R305	1-216-051-61	RES-CHIP	1.2K	5%	1/10W
R306	1-216-085-00	METAL CHIP	33K	5%	1/10W

REF NO.	PART NO.	DESCRIPTION		REMARK	
R308	1-216-025-61	RES-CHIP	100	5%	1/10W
R309	1-216-025-61	RES-CHIP	100	5%	1/10W
R310	1-216-025-61	RES-CHIP	100	5%	1/10W
R311	1-216-017-61	RES-CHIP	47	5%	1/10W
R312	1-216-041-61	RES-CHIP	470	5%	1/10W
R313	1-216-053-61	RES-CHIP	1.5K	5%	1/10W
R314	1-216-043-61	RES-CHIP	560	5%	1/10W
R315	1-216-053-61	RES-CHIP	1.5K	5%	1/10W
R316	1-216-053-61	RES-CHIP	1.5K	5%	1/10W
R317	1-216-077-61	RES, CHIP	15K		(2012)
R318	1-216-051-61	RES-CHIP	1.2K	5%	1/10W
R319	1-216-025-61	RES-CHIP	100	5%	1/10W
R320	1-216-065-61	RES-CHIP	4.7K	5%	1/10W
R321	1-216-073-61	RES-CHIP	10K	5%	1/10W
R322	1-216-033-61	RES-CHIP	220	5%	1/10W
R326	1-216-295-61	SHORT CHIP	0		
R331	1-216-295-61	SHORT CHIP	0		
R332	1-216-033-61	RES-CHIP	220	5%	1/10W
R333	1-216-083-61	RES-CHIP	27K	5%	1/10W
R334	1-216-129-61	METAL CHIP	2.2M	5%	1/10W
R335	1-216-045-00	METAL CHIP	680	5%	1/10W
R338	1-216-037-61	RES-CHIP	330	5%	1/10W
R340	1-216-025-61	RES-CHIP	100	5%	1/10W
R345	1-216-081-61	RES-CHIP	22K	5%	1/10W
R346	1-216-051-61	RES-CHIP	1.2K	5%	1/10W
R347	1-216-051-61	RES-CHIP	1.2K	5%	1/10W
R348	1-208-806-11	METAL CHIP	10K	0.5%	1/10W
R349	1-216-073-61	RES-CHIP	10K	5%	1/10W
R350	1-216-061-00	RES-CHIP	3.3K	5%	1/10W
R351	1-216-053-61	RES-CHIP	1.5K	5%	1/10W
R354	1-216-057-61	RES-CHIP	2.2K	5%	1/10W
R355	1-216-057-61	RES-CHIP	2.2K	5%	1/10W
R356	1-216-057-61	RES-CHIP	2.2K	5%	1/10W
R357	1-216-079-00	METAL CHIP	18K	5%	1/10W
R358	1-216-049-61	RES-CHIP	1K	5%	1/10W
R359	1-216-033-61	RES-CHIP	220	5%	1/10W
R360	1-216-033-61	RES-CHIP	220	5%	1/10W
R361	1-216-073-61	RES-CHIP	10K	5%	1/10W
R362	1-216-075-61	RES-CHIP	12K	5%	1/10W
R363	1-216-079-00	METAL CHIP	18K	5%	1/10W
R364	1-216-295-61	SHORT CHIP	0		
R365	1-216-033-61	RES-CHIP	220	5%	1/10W
R366	1-216-073-61	RES-CHIP	10K	5%	1/10W
R367	1-216-073-61	RES-CHIP	10K	5%	1/10W
R368	1-216-073-61	RES-CHIP	10K	5%	1/10W
R370	1-216-033-61	RES-CHIP	220	5%	1/10W
R375	1-216-025-61	RES-CHIP	100	5%	1/10W
R376	1-216-081-61	RES-CHIP	22K	5%	1/10W
R377	1-216-121-61	RES-CHIP	1M	5%	1/10W
R378	1-216-031-61	RES-CHIP	180	5%	1/10W
R500	1-249-417-11	CARBON	1K	5%	1/4W
R501	1-216-049-61	RES-CHIP	1K	5%	1/10W
R505	1-208-830-11	METAL CHIP	100K	0.5%	1/10W
R506	1-216-081-61	RES-CHIP	22K	5%	1/10W
R507	1-249-389-11	CARBON	4.7	5%	1/4W
R508	1-216-471-11	METAL OXIDE	27	5%	3W
R509	1-216-473-11	METAL OXIDE	56	5%	3W
R510	1-216-449-11	METAL OXIDE	56	5%	2W
R511	1-215-908-00	METAL OXIDE	33	5%	3W
R515	1-215-911-11	METAL OXIDE	100	5%	3W
R517	1-208-798-11	METAL CHIP	4.7K	0.5%	1/10W

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Replace only with part number specified.

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REF NO.	PART NO.	DESCRIPTION		REMARK	
R518	1-247-807-31	CARBON	100	5%	1/4W
R519	1-215-913-11	METAL OXIDE	220	5%	3W
R520	1-215-445-00	METAL	10K	1%	1/4W
R522	1-208-806-11	METAL CHIP	10K	0.5%	1/10W
R523	1-249-411-11	CARBON	330	5%	1/4W
R525	1-208-846-11	METAL CHIP	470K	0.5%	1/10W
R526	1-208-804-11	METAL CHIP	8.2K	0.5%	1/10W
R527	1-216-001-61	RES-CHIP	10	5%	1/10W
R528	1-208-814-91	METAL CHIP	22K	0.5%	1/10W
R529	1-216-635-11	METAL CHIP	220	0.5%	1/10W
R531	1-247-843-11	CARBON	3.3K	5%	1/4W
R533	1-249-417-11	CARBON	1K	5%	1/4W
R534	1-216-364-21	METAL OXIDE	0.39	5%	2W
R535	1-216-067-00	METAL CHIP	5.6K	5%	1/10W
R536	1-216-067-00	METAL CHIP	5.6K	5%	1/10W
R537	1-208-804-11	METAL CHIP	8.2K	0.5%	1/10W
R539	1-216-049-61	RES-CHIP	1K	5%	1/10W
R540	1-216-065-61	RES-CHIP	4.7K	5%	1/10W
R541	1-216-065-61	RES-CHIP	4.7K	5%	1/10W
R542	1-216-073-61	RES-CHIP	10K	5%	1/10W
R543	1-216-437-00	METAL OXIDE	5.6K	5%	1W
R544	1-215-917-11	METAL OXIDE	1K	5%	3W
R545	1-216-077-61	RES, CHIP	15K		(2012)
R546	1-216-077-61	RES, CHIP	15K		(2012)
R547	1-216-085-00	METAL CHIP	33K	5%	1/10W
R548	1-208-796-11	METAL CHIP	3.9K	0.5%	1/10W
R549	1-215-452-00	METAL	20K	1%	1/4W
R550	1-216-097-61	RES-CHIP	100K	5%	1/10W
R551	1-249-441-11	CARBON	100K	5%	1/4W
R552	1-216-057-61	RES-CHIP	2.2K	5%	1/10W
R553	1-215-453-00	METAL	22K	1%	1/4W
R554	1-215-453-00	METAL	22K	1%	1/4W
R556	1-215-437-00	METAL	4.7K	1%	1/4W
R558	1-247-843-11	CARBON	3.3K	5%	1/4W
R559	1-247-855-31	CARBON	10K	5%	1/4W
R560	1-216-073-61	RES-CHIP	10K	5%	1/10W
R561	1-216-049-61	RES-CHIP	1K	5%	1/10W
R562	1-249-401-11	CARBON	47	5%	1/4W
R564	1-208-820-11	METAL CHIP	39K	0.5%	1/10W
R565	1-216-073-61	RES-CHIP	10K	5%	1/10W
R567	1-216-105-61	METAL CHIP	220K	5%	1/10W
R568	1-249-383-11	CARBON	1.5	5%	1/4W
R570	1-216-069-61	RES-CHIP	6.8K	5%	1/10W
R571	1-215-443-00	METAL	8.2K	1%	1/4W
R573	1-216-083-61	RES-CHIP	27K	5%	1/10W
R575	1-208-796-11	METAL CHIP	3.9K	0.5%	1/10W
R577	1-215-913-11	METAL OXIDE	220	5%	3W
R578	1-216-369-00	METAL OXIDE	1	5%	2W
R579	1-216-295-61	SHORT CHIP	0		
R580	1-208-830-11	METAL CHIP	100K	0.5%	1/10W
R581	1-208-790-11	METAL CHIP	2.2K	0.5%	1/10W
R582	1-208-846-11	METAL CHIP	470K	0.5%	1/10W
R584	1-208-798-11	METAL CHIP	4.7K	0.5%	1/10W
R587	1-216-295-61	SHORT CHIP	0		
R588	1-215-888-00	METAL OXIDE	220	5%	2W
R589	1-215-888-00	METAL OXIDE	220	5%	2W
R590	1-215-465-00	METAL	68K	1%	1/4W
R591	1-260-288-11	CARBON	0.47	5%	1/2W
R592	1-208-820-11	METAL CHIP	39K	0.5%	1/10W
R593	1-260-288-11	CARBON	0.47	5%	1/2W

REF NO.	PART NO.	DESCRIPTION		REMARK	
R594	1-260-288-11	CARBON	0.47	5%	1/2W
R595	1-216-073-61	RES-CHIP	10K	5%	1/10W
R596	1-215-916-00	METAL OXIDE	680	5%	3W
R597	1-247-750-11	CARBON	680	5%	1/2W
R598	1-249-438-11	CARBON	56K	5%	1/4W
R599	1-249-389-11	CARBON	4.7	5%	1/4W
R600	1-249-438-11	CARBON	56K	5%	1/4W
R601	1-249-420-11	CARBON	1.8K	5%	1/4W
R602	1-249-389-11	CARBON	4.7	5%	1/4W
R603	1-215-485-00	METAL	470K	1%	1/4W
R604	1-216-097-61	RES-CHIP	100K	5%	1/10W
R606	1-216-308-61	METAL CHIP	4.7	5%	1/10W
R607	1-247-847-31	CARBON	4.7K	5%	1/4W
R608	1-240-205-51	CARBON	22M	5%	1/2W
R609	1-216-057-61	RES-CHIP	2.2K	5%	1/10W
R610	1-216-073-61	RES-CHIP	10K	5%	1/10W
R611	1-216-089-61	RES, CHIP 47K		(2012)	
R612	1-216-045-00	METAL CHIP	680	5%	1/10W
R614	1-216-041-61	RES-CHIP	470	5%	1/10W
R615	1-216-369-00	METAL OXIDE	1	5%	2W
R616	1-260-302-51	CARBON	6.8	5%	1/2W
R617	1-249-397-11	CARBON	22	5%	1/4W
R619	1-260-128-91	CARBON	270K	5%	1/2W
R620	1-129-720-00	FILM	0.033UF	5.00%	630V
R621	1-215-864-00	METAL OXIDE	150	5%	1W
R623	1-216-095-61	RES-CHIP	82K	5%	1/10W
R624	1-216-089-61	RES, CHIP 47K		(2012)	
R626	1-216-049-61	RES-CHIP	1K	5%	1/10W
R627	1-240-251-11	CMT-MELF	6.8	5%	10W
R629	1-247-747-11	CARBON	470	5%	1/2W
R630	1-249-429-11	CARBON	10K	5%	1/4W
R631	1-216-089-61	RES, CHIP 47K		(2012)	
R632	1-220-886-11	FUSIBLE	0.1	10%	1W
R634	⚠ 1-218-265-11	METAL	8.2M	5%	1W
R635	1-216-492-21	METAL OXIDE	82K	5%	3W
R636	1-215-924-00	METAL OXIDE	15K	5%	3W
R637	1-216-492-21	METAL OXIDE	82K	5%	3W
R639	1-216-361-21	METAL OXIDE	0.22	5%	2W
R640	1-249-415-11	CARBON	680	5%	1/4W
R641	1-216-361-21	METAL OXIDE	0.22	5%	2W
R642	1-249-419-11	CARBON	1.5K	5%	1/4W
R643	1-247-843-11	CARBON	3.3K	5%	1/4W
R644	1-249-419-11	CARBON	1.5K	5%	1/4W
R646	1-215-924-00	METAL OXIDE	15K	5%	3W
R647	1-249-387-11	CARBON	3.3	5%	1/4W
R648	1-216-057-61	RES-CHIP	2.2K	5%	1/10W
R649	1-249-417-11	CARBON	1K	5%	1/4W
R650	1-215-882-00	METAL OXIDE	22	5%	2W
R652	1-215-900-11	METAL OXIDE	22K	5%	2W
R653	1-215-873-00	METAL OXIDE	4.7K	5%	1W
R656	1-249-417-11	CARBON	1K	5%	1/4W
R657	1-260-127-11	CARBON	220K	5%	1/2W
R659	1-216-049-61	RES-CHIP	1K	5%	1/10W
R660	1-216-073-61	RES-CHIP	10K	5%	1/10W
R661	1-215-873-00	METAL OXIDE	4.7K	5%	1W
R682	1-249-377-11	CARBON	0.47	5%	1/4W
R901	1-249-411-11	CARBON	330	5%	1/4W
R902	1-249-411-11	CARBON	330	5%	1/4W
R909	1-216-065-61	RES-CHIP	4.7K	5%	1/10W
R910	1-216-065-61	RES-CHIP	4.7K	5%	1/10W

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Replace only with part number specified.

A **B6**

REF NO.		PART NO.	DESCRIPTION	REMARK
			<RELAY>	
RY600	⚠	1-755-214-11	RELAY, AC POWER	
RY601	⚠	1-755-214-11	RELAY, AC POWER	
			<SWITCH>	
S501		1-572-707-11	SWITCH, LEVER	
S502		1-572-707-11	SWITCH, LEVER	
			<TRANSFORMER>	
T501		1-437-195-11	TRANSFORMER, HORIZONTAL DRIVE	
T503	⚠	1-453-284-11	TRANSFORMER ASSY FLYBACK (NX-4009//M314)	
T504		1-431-693-11	TRANSFORMER, HORIZONTAL LINEAR	
T505		1-426-981-11	TRANSFORMER, FERRITE (PMT)	
T601	⚠	1-424-505-11	TRANSFORMER, LINE FILTER	
T603	⚠	1-437-464-11	TRANSFORMER, CONVERTER	
T604	⚠	1-431-852-11	TRANSFORMER, CONVERTER (SRT)	
			<THERMISTOR>	
THP600		1-803-540-11	THERMISTOR	
			<TUNER>	
TU101		8-598-449-10	TUNER, FSS BTF-LG433	
			<CRYSTAL>	
X001		1-579-125-11	VIBRATOR, CERAMIC	
X301		1-567-504-11	VIBRATOR, CRYSTAL	
X302		1-781-132-11	VIBRATOR, CRYSTAL	

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		A-1136-125-A	B6 BOARD COMPLETE (NOT SUPPLY) **********			
		1-533-223-11	HOLDER, FUSE			
			<CAPACITOR>			
C8227		1-163-037-11	CERAMIC CHIP	0.022UF	10.00%	50V
C8228		1-163-024-00	CERAMIC CHIP	0.018UF	10.00%	50V
C8229		1-163-018-00	CERAMIC CHIP	0.0056UF	10.00%	50V
C8230		1-163-024-00	CERAMIC CHIP	0.018UF	10.00%	50V
C8231		1-163-018-00	CERAMIC CHIP	0.0056UF	10.00%	50V
C8232		1-163-037-11	CERAMIC CHIP	0.022UF	10.00%	50V
C8233		1-164-004-51	CERAMIC CHIP	0.1UF	10.00%	25V
C8234		1-164-004-51	CERAMIC CHIP	0.1UF	10.00%	25V
C8235		1-164-004-51	CERAMIC CHIP	0.1UF	10.00%	25V
C8236		1-164-004-51	CERAMIC CHIP	0.1UF	10.00%	25V
C8238		1-164-505-51	CERAMIC CHIP	2.2UF	10%	16V
C8240		1-164-505-51	CERAMIC CHIP	2.2UF	10%	16V
C8241		1-164-346-51	CERAMIC CHIP	1UF	10%	16V
C8242		1-164-505-51	CERAMIC CHIP	2.2UF	10%	16V
C8243		1-164-346-51	CERAMIC CHIP	1UF	10%	16V

REF NO.		PART NO.	DESCRIPTION			
C8244		1-164-700-51	CERAMIC CHIP	0.68UF		16V
C8245		1-164-346-51	CERAMIC CHIP	1UF	10%	16V
C8246		1-163-018-00	CERAMIC CHIP	0.0056UF	10.00%	50V
C8247		1-164-346-51	CERAMIC CHIP	1UF	10%	16V
C8248		1-163-010-11	CERAMIC CHIP	0.0012UF	10.00%	50V
C8249		1-164-004-51	CERAMIC CHIP	0.1UF	10.00%	25V
C8250		1-164-346-51	CERAMIC CHIP	1UF	10%	16V
C8251		1-163-017-00	CERAMIC CHIP	0.0047UF	10.00%	50V
C8252		1-164-346-51	CERAMIC CHIP	1UF	10%	16V
C8253		1-163-037-11	CERAMIC CHIP	0.022UF	10.00%	50V
C8254		1-126-965-11	ELECT	22UF	20.00%	50V
C8255		1-163-037-11	CERAMIC CHIP	0.022UF	10.00%	50V
C8258		1-164-004-51	CERAMIC CHIP	0.1UF	10.00%	25V
C8259		1-126-933-11	ELECT	100UF	20.00%	16V
C8260		1-163-251-11	CERAMIC CHIP	100PF	5.00%	50V
C8261		1-163-251-11	CERAMIC CHIP	100PF	5.00%	50V
C8263		1-164-004-51	CERAMIC CHIP	0.1UF	10.00%	25V
C8301		1-126-933-11	ELECT	100UF	20.00%	16V
C8304		1-126-967-11	ELECT	47UF	20.00%	50V
C8305		1-164-004-51	CERAMIC CHIP	0.1UF	10.00%	25V
C8333		1-126-964-51	ELECT	10UF	20.00%	50V
C8401		1-164-346-51	CERAMIC CHIP	1UF	10%	16V
C8402		1-164-346-51	CERAMIC CHIP	1UF	10%	16V
C8403		1-163-005-51	CERAMIC CHIP	470PF	10%	50V
C8404		1-163-005-51	CERAMIC CHIP	470PF	10%	50V
C8405		1-126-935-11	ELECT	470UF	20.00%	16V
C8406		1-164-346-51	CERAMIC CHIP	1UF	10%	16V
C8407		1-164-346-51	CERAMIC CHIP	1UF	10%	16V
C8408		1-163-133-00	CERAMIC CHIP	470PF	10%	50V
C8409		1-126-933-11	ELECT	100UF	20.00%	16V
C8410		1-164-346-51	CERAMIC CHIP	1UF	10%	16V
C8411		1-163-133-00	CERAMIC CHIP	470PF	10%	50V
C8412		1-164-346-51	CERAMIC CHIP	1UF	10%	16V
C8413		1-163-133-00	CERAMIC CHIP	470PF	10%	50V
C8414		1-126-963-11	ELECT	4.7UF	20.00%	50V
C8415		1-163-133-00	CERAMIC CHIP	470PF	10%	50V
C8416		1-164-346-51	CERAMIC CHIP	1UF	10%	16V
C8417		1-163-133-00	CERAMIC CHIP	470PF	10%	50V
C8418		1-164-346-51	CERAMIC CHIP	1UF	10%	16V
C8419		1-163-133-00	CERAMIC CHIP	470PF	10%	50V
C8571		1-163-263-51	CERAMIC CHIP	330PF	10%	50V
C8572		1-164-004-51	CERAMIC CHIP	0.1UF	10.00%	25V
C8574		1-216-295-61	SHORT CHIP	0		
C8575		1-163-255-11	CERAMIC CHIP	150PF	5.00%	50V
C8576		1-126-940-11	ELECT	330UF	20.00%	16V
C8577		1-165-319-11	CERAMIC CHIP	0.1UF		50V
C8578		1-165-319-11	CERAMIC CHIP	0.1UF		50V
C8579		1-126-967-11	ELECT	47UF	20.00%	50V
C8580		1-165-319-11	CERAMIC CHIP	0.1UF		50V
C8581		1-165-319-11	CERAMIC CHIP	0.1UF		50V
C8601	⚠	1-104-708-11	MYLAR	0.47UF	20.00%	250V
C8602	⚠	1-109-835-11	MYLAR	0.68UF	20.00%	250V
C8654	⚠	1-117-703-11	CERAMIC	0.0047UF	99%	250V
			<CONNECTOR>			
CN8401		1-564-509-11	PLUG, CONNECTOR 6P			
CN8402	*	1-764-333-11	PLUG, CONNECTOR 10P			
CN8403	*	1-564-510-11	PLUG, CONNECTOR 7P			
CN8501		1-564-506-11	PLUG, CONNECTOR 3P			
CN8601		1-580-843-11	PIN, CONNECTOR (POWER)			

The components identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

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REF NO.	PART NO.	DESCRIPTION	REMARK
CN8602	1-580-843-11	PIN, CONNECTOR (POWER)	
CN8603	1-695-915-11	TAB (CONTACT)	
		<DIODE>	
D8300	8-719-069-60	UDZSTE-179.1B	
D8401	8-719-069-60	UDZSTE-179.1B	
D8402	8-719-069-60	UDZSTE-179.1B	
D8403	8-719-069-60	UDZSTE-179.1B	
D8404	8-719-069-60	UDZSTE-179.1B	
D8405	8-719-069-60	UDZSTE-179.1B	
D8406	8-719-069-60	UDZSTE-179.1B	
D8407	8-719-069-60	UDZSTE-179.1B	
D8408	8-719-069-60	UDZSTE-179.1B	
D8409	8-719-069-60	UDZSTE-179.1B	
D8410	8-719-069-60	UDZSTE-179.1B	
D8411	8-719-069-60	UDZSTE-179.1B	
D8412	8-719-914-42	DA204K	
D8413	8-719-069-60	UDZSTE-179.1B	
		<FUSE>	
F8601 ⚠	1-532-299-00	FUSE, TIME-LAG 5A/250V	
		<IC>	
IC8203	8-759-553-40	TDA7429S	
IC8204	8-759-100-96	UPC4558G2	
IC8501	8-752-058-68	CXA1315M	
		<JACK>	
J8402	1-778-388-11	JACK BLOCK, PIN 9P	
		<CHIP CONDUCTOR>	
JR8206	1-216-295-61	SHORT CHIP 0	
JR8401	1-216-295-61	SHORT CHIP 0	
		<COIL>	
L8204	1-414-856-11	INDUCTOR 10UH	
L8301	1-414-189-31	INDUCTOR 100UH	
L8502	1-414-856-11	INDUCTOR 10UH	
L8570	1-410-470-11	INDUCTOR 10UH	
		<TRANSISTOR>	
Q8309	8-729-120-28	2SC1623-L5L6	
Q8310	8-729-120-28	2SC1623-L5L6	
Q8401	8-729-424-67	UN2216	
Q8402	8-729-424-67	UN2216	
Q8403	8-729-216-22	2SA1162-G	
Q8404	8-729-216-22	2SA1162-G	
Q8571	8-729-230-49	2SC2712-YG	
Q8572	8-729-230-49	2SC2712-YG	
Q8573	8-729-216-22	2SA1162-G	
Q8574	8-729-230-49	2SC2712-YG	
Q8575	8-729-216-22	2SA1162-G	
Q8576	8-729-216-22	2SA1162-G	
Q8577	8-729-216-22	2SA1162-G	

REF NO.	PART NO.	DESCRIPTION			REMARK
		<RESISTOR>			
R8215	1-216-059-61	RES-CHIP	2.7K	5%	1/10W
R8216	1-216-059-61	RES-CHIP	2.7K	5%	1/10W
R8217	1-216-067-00	METAL CHIP	5.6K	5%	1/10W
R8218	1-216-067-00	METAL CHIP	5.6K	5%	1/10W
R8219	1-216-025-61	RES-CHIP	100	5%	1/10W
R8220	1-216-025-61	RES-CHIP	100	5%	1/10W
R8221	1-216-689-11	RES, CHIP	39K		(2012)
R8222	1-216-689-11	RES, CHIP	39K		(2012)
R8223	1-216-063-61	RES-CHIP	3.9K	5%	1/10W
R8224	1-216-073-61	RES-CHIP	10K	5%	1/10W
R8225	1-216-069-61	RES-CHIP	6.8K	5%	1/10W
R8226	1-216-069-61	RES-CHIP	6.8K	5%	1/10W
R8238	1-216-067-00	METAL CHIP	5.6K	5%	1/10W
R8239	1-216-067-00	METAL CHIP	5.6K	5%	1/10W
R8240	1-216-689-11	RES, CHIP 39K		(2012)	
R8241	1-216-067-00	METAL CHIP	5.6K	5%	1/10W
R8242	1-216-067-00	METAL CHIP	5.6K	5%	1/10W
R8243	1-216-689-11	RES, CHIP	39K		(2012)
R8334	1-216-022-00	METAL CHIP	75	5%	1/10W
R8335	1-216-033-61	RES-CHIP	220	5%	1/10W
R8336	1-216-041-61	RES-CHIP	470	5%	1/10W
R8337	1-216-045-00	METAL CHIP	680	5%	1/10W
R8339	1-216-057-61	RES-CHIP	2.2K	5%	1/10W
R8341	1-216-045-00	METAL CHIP	680	5%	1/10W
R8342	1-216-049-61	RES-CHIP	1K	5%	1/10W
R8343	1-216-063-61	RES-CHIP	3.9K	5%	1/10W
R8344	1-216-073-61	RES-CHIP	10K	5%	1/10W
R8401	1-216-049-61	RES-CHIP	1K	5%	1/10W
R8402	1-216-073-61	RES-CHIP	10K	5%	1/10W
R8403	1-216-073-61	RES-CHIP	10K	5%	1/10W
R8404	1-216-073-61	RES-CHIP	10K	5%	1/10W
R8405	1-216-049-61	RES-CHIP	1K	5%	1/10W
R8406	1-216-073-61	RES-CHIP	10K	5%	1/10W
R8407	1-216-049-61	RES-CHIP	1K	5%	1/10W
R8408	1-216-049-61	RES-CHIP	1K	5%	1/10W
R8409	1-216-041-61	RES-CHIP	470	5%	1/10W
R8410	1-216-113-61	RES-CHIP	470K	5%	1/10W
R8411	1-216-113-61	RES-CHIP	470K	5%	1/10W
R8412	1-216-041-61	RES-CHIP	470	5%	1/10W
R8413	1-216-021-61	RES-CHIP	68	5%	1/10W
R8414	1-216-113-61	RES-CHIP	470K	5%	1/10W
R8415	1-216-113-61	RES-CHIP	470K	5%	1/10W
R8416	1-216-089-61	RES, CHIP	47K		(2012)
R8417	1-216-089-61	RES, CHIP	47K		(2012)
R8418	1-216-113-61	RES-CHIP	470K	5%	1/10W
R8419	1-216-022-00	METAL CHIP	75	5%	1/10W
R8420	1-216-113-61	RES-CHIP	470K	5%	1/10W
R8421	1-216-077-61	RES, CHIP	15K		(2012)
R8422	1-216-077-61	RES, CHIP	15K		(2012)
R8423	1-216-113-61	RES-CHIP	470K	5%	1/10W
R8424	1-216-022-00	METAL CHIP	75	5%	1/10W
R8425	1-216-033-61	RES-CHIP	220	5%	1/10W
R8426	1-216-033-61	RES-CHIP	220	5%	1/10W
R8427	1-216-089-61	RES, CHIP	47K		(2012)
R8428	1-216-113-61	RES-CHIP	470K	5%	1/10W
R8429	1-216-089-61	RES, CHIP 47K		(2012)	
R8430	1-216-113-61	RES-CHIP	470K	5%	1/10W
R8570	1-216-021-61	RES-CHIP	68	5%	1/10W
R8571	1-216-645-11	METAL CHIP	560	0.5%	1/10W
R8572	1-216-061-00	RES-CHIP	3.3K	5%	1/10W

The components identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

B6 **C6**

REF NO.		PART NO.	DESCRIPTION			REMARK
R8573		1-216-073-61	RES-CHIP	10K	5%	1/10W
R8574		1-208-798-11	METAL CHIP	4.7K	0.5%	1/10W
R8575		1-216-081-61	RES-CHIP	22K	5%	1/10W
R8577		1-216-049-61	RES-CHIP	1K	5%	1/10W
R8578		1-216-033-61	RES-CHIP	220	5%	1/10W
R8579		1-216-049-61	RES-CHIP	1K	5%	1/10W
R8580		1-216-049-61	RES-CHIP	1K	5%	1/10W
R8581		1-216-675-91	METAL CHIP	10K	0.5%	1/10W
R8582		1-208-802-11	METAL CHIP	6.8K	0.5%	1/10W
R8583		1-216-675-91	METAL CHIP	10K	0.5%	1/10W
R8584		1-216-675-91	METAL CHIP	10K	0.5%	1/10W
R8585		1-216-675-91	METAL CHIP	10K	0.5%	1/10W
R8586		1-216-679-11	METAL CHIP	15K	0.5%	1/10W
R8589		1-216-073-61	RES-CHIP	10K	5%	1/10W
R8590		1-216-073-61	RES-CHIP	10K	5%	1/10W
R8591		1-216-073-61	RES-CHIP	10K	5%	1/10W
R8592		1-216-073-61	RES-CHIP	10K	5%	1/10W
R8593		1-216-057-61	RES-CHIP	2.2K	5%	1/10W
R8594		1-216-057-61	RES-CHIP	2.2K	5%	1/10W
R8595		1-216-057-61	RES-CHIP	2.2K	5%	1/10W
R8596		1-216-057-61	RES-CHIP	2.2K	5%	1/10W
R8598		1-216-025-61	RES-CHIP	100	5%	1/10W
R8599		1-216-025-61	RES-CHIP	100	5%	1/10W
R8601	⚠	1-202-719-00	SOLID	1M	10%	1/2W
			<TRANSFORMER>			
T8601	⚠	1-424-505-11	TRANSFORMER, LINE FILTER			
T8602	⚠	1-431-182-11	TRANSFORMER, LINE FILTER			
			<VARISTOR>			
VDR8461		1-803-830-11	VARISTOR (ERZV14D621)			
**********						
		A-1332-094-A	C6 BOARD MOUNTED (NOT SUPPLY) **********			
		7-682-948-01	SCREW +PSW 3X8			
			<CAPACITOR>			
C701		1-162-114-00	CERAMIC	0.0047UF		2KV
C702		1-102-074-00	CERAMIC	0.001UF	10.00%	50V
C708		1-102-114-00	CERAMIC	470PF	10.00%	50V
C709		1-102-114-00	CERAMIC	470PF	10.00%	50V
C710		1-102-114-00	CERAMIC	470PF	10.00%	50V
C712		1-102-115-00	CERAMIC	560PF	10.00%	50V
C713		1-102-112-00	CERAMIC	330PF	10.00%	50V
C714		1-102-113-00	CERAMIC	390PF	10.00%	50V
C716		1-126-933-11	ELECT	100UF	20.00%	16V
C717		1-107-651-11	ELECT	4.7UF	20.00%	250V
C726		1-126-947-11	ELECT	47UF	20.00%	25V
C1800		1-126-964-51	ELECT	10UF	20.00%	50V
C1803		1-126-964-51	ELECT	10UF	20.00%	50V
C1804		1-126-964-51	ELECT	10UF	20.00%	50V
C1809		1-126-942-61	ELECT	1000UF	20.00%	25V

REF NO.		PART NO.	DESCRIPTION	REMARK
			<CONNECTOR>	
CN700		1-695-915-11	TAB (CONTACT)	
CN701		1-508-765-00	PIN, CONNECTOR (5MM PITCH) 3P	
CN702		1-695-915-11	TAB (CONTACT)	
CN703		1-564-509-11	PLUG, CONNECTOR 6P	
CN704		4-352-844-01	PIN, LEAD, COATING	
CN706		1-695-915-11	TAB (CONTACT)	
CN1801	*	1-564-509-11	PLUG, CONNECTOR 6P	
CN1802		1-564-506-11	PLUG, CONNECTOR 3P	
			<DIODE>	
D701		8-719-911-19	1SS119-25	
D702		8-719-911-19	1SS119-25	
D703		8-719-911-19	1SS119-25	
D704		8-719-911-19	1SS119-25	
D705		8-719-911-19	1SS119-25	
D706		8-719-911-19	1SS119-25	
D707		8-719-911-19	1SS119-25	
D708		8-719-911-19	1SS119-25	
D709		8-719-911-19	1SS119-25	
D710		8-719-911-19	1SS119-25	
D711		8-719-911-19	1SS119-25	
D712		8-719-911-19	1SS119-25	
D713		8-719-911-19	1SS119-25	
D714		8-719-911-19	1SS119-25	
D715		8-719-911-19	1SS119-25	
D716		8-719-911-19	1SS119-25	
D717		8-719-929-15	HZS9.1NB2	
D1803		8-719-911-19	1SS119-25	
D1804		8-719-911-19	1SS119-25	
D1808		8-719-908-03	GP08D	
			<IC>	
IC1800		8-759-822-38	LA6510	
			<JACK>	
J701	⚠	1-540-071-22	SOCKET, CRT	
			<COIL>	
L701		1-410-667-31	INDUCTOR 22UH	
L703		1-408-611-31	INDUCTOR 47UH	
L705		1-408-609-41	INDUCTOR 33UH	
L707		1-408-611-31	INDUCTOR 47UH	
			<TRANSISTOR>	
Q701		8-729-326-11	2SC2611	
Q702		8-729-326-11	2SC2611	
Q703		8-729-326-11	2SC2611	
Q704		8-729-326-11	2SC2611	
Q705		8-729-326-11	2SC2611	
Q706		8-729-326-11	2SC2611	
Q707		8-729-200-17	2SA1091-O	
Q708		8-729-200-17	2SA1091-O	
Q709		8-729-200-17	2SA1091-O	
Q710		8-729-119-78	2SC2785-HFE	

C6 D3

REF NO.	PART NO.	DESCRIPTION			REMARK
Q711	8-729-119-78	2SC2785-HFE			
Q712	8-729-119-78	2SC2785-HFE			
Q714	8-729-255-12	2SC2551-O			
Q1800	8-729-119-76	2SA1175-HFE			
Q1802	8-729-119-78	2SC2785-HFE			
		<RESISTOR>			
R701	1-219-752-11	CARBON	100K	5%	1/2W
R705	1-216-392-11	METAL OXIDE	1.8	5%	3W
R710	1-215-923-00	METAL OXIDE	10K	5%	3W
R711	1-260-330-11	CARBON	1.5K	5%	1/2W
R712	1-215-923-00	METAL OXIDE	10K	5%	3W
R713	1-260-330-11	CARBON	1.5K	5%	1/2W
R714	1-215-923-00	METAL OXIDE	10K	5%	3W
R715	1-260-330-11	CARBON	1.5K	5%	1/2W
R716	1-249-899-11	CARBON	100	5%	1/4W
R717	1-249-899-11	CARBON	100	5%	1/4W
R718	1-249-899-11	CARBON	100	5%	1/4W
R719	1-215-469-00	METAL	100K	1%	1/4W
R720	1-249-923-11	CARBON	1K	5%	1/4W
R722	1-249-923-11	CARBON	1K	5%	1/4W
R723	1-215-469-00	METAL	100K	1%	1/4W
R724	1-249-923-11	CARBON	1K	5%	1/4W
R725	1-249-424-11	CARBON	3.9K	5%	1/4W
R726	1-249-424-11	CARBON	3.9K	5%	1/4W
R727	1-249-424-11	CARBON	3.9K	5%	1/4W
R728	1-249-408-11	CARBON	180	5%	1/4W
R729	1-249-408-11	CARBON	180	5%	1/4W
R730	1-249-408-11	CARBON	180	5%	1/4W
R731	1-249-401-11	CARBON	47	5%	1/4W
R732	1-249-401-11	CARBON	47	5%	1/4W
R733	1-249-401-11	CARBON	47	5%	1/4W
R734	1-219-753-11	CARBON	100	5%	1/2W
R738	1-247-807-31	CARBON	100	5%	1/4W
R739	1-247-807-31	CARBON	100	5%	1/4W
R740	1-247-807-31	CARBON	100	5%	1/4W
R744	1-215-415-00	METAL	560	1%	1/4W
R745	1-215-410-00	METAL	360	1%	1/4W
R747	1-215-926-00	METAL OXIDE	33K	5%	3W
R749	1-215-927-00	METAL OXIDE	47K	5%	3W
R751	1-216-490-11	METAL OXIDE	39K	5%	3W
R753	1-247-855-31	CARBON	10K	5%	1/4W
R755	1-249-427-11	CARBON	6.8K	5%	1/4W
R756	1-249-427-11	CARBON	6.8K	5%	1/4W
R757	1-249-427-11	CARBON	6.8K	5%	1/4W
R758	1-249-419-11	CARBON	1.5K	5%	1/4W
R759	1-249-419-11	CARBON	1.5K	5%	1/4W
R760	1-249-419-11	CARBON	1.5K	5%	1/4W
R1800	1-249-417-11	CARBON	1K	5%	1/4W
R1801	1-249-426-11	CARBON	5.6K	5%	1/4W
R1802	1-249-387-11	CARBON	3.3	5%	1/4W
R1803	1-249-387-11	CARBON	3.3	5%	1/4W
R1805	1-247-855-31	CARBON	10K	5%	1/4W
R1806	1-247-847-31	CARBON	4.7K	5%	1/4W
R1808	1-247-847-31	CARBON	4.7K	5%	1/4W
R1809	1-249-435-11	CARBON	33K	5%	1/4W
R1810	1-249-435-11	CARBON	33K	5%	1/4W
R1811	1-249-435-11	CARBON	33K	5%	1/4W
R1812	1-249-435-11	CARBON	33K	5%	1/4W
R1821	1-249-435-11	CARBON	33K	5%	1/4W
R1822	1-249-435-11	CARBON	33K	5%	1/4W
R1823	1-249-426-11	CARBON	5.6K	5%	1/4W

REF NO.	PART NO.	DESCRIPTION			REMARK
R1824	1-249-435-11	CARBON	33K	5%	1/4W
R1825	1-247-843-11	CARBON	3.3K	5%	1/4W
		<VARIABLE RESISTOR>			
RV702	1-241-656-11	RES, ADJ, METAL FILM 110M			
RV1801	1-238-019-11	RES, ADJ, CARBON 47K			

****

	A-1343-919-A	D3 BOARD MOUNTED (NOT SUPPLY) **********			
		<CAPACITOR>			
C2800	1-126-947-11	ELECT	47UF	20.00%	25V
C2801	1-137-399-11	MYLAR	0.1UF	10.00%	100V
C2802	1-136-155-00	FILM	0.015UF	5.00%	50V
C2803	1-129-723-00	FILM	0.056UF	5.00%	630V
C2805	1-126-947-11	ELECT	47UF	20.00%	25V
C2806	1-110-171-31	MYLAR	0.047UF	5.00%	100V
C2807	1-137-194-51	FILM	0.47UF	5.00%	50V
C2808	1-126-964-51	ELECT	10UF	20.00%	50V
C2809	1-137-194-51	FILM	0.47UF	5.00%	50V
C2810	1-106-375-12	MYLAR	0.022UF	10.00%	250V
C2811	1-126-964-51	ELECT	10UF	20.00%	50V
C2812	1-126-964-51	ELECT	10UF	20.00%	50V
C2813	1-129-708-61	FILM	0.0033UF	5.00%	630V
		<CONNECTOR>			
CN2800 *	1-564-510-11	PLUG, CONNECTOR 7P			
CN2802	1-564-506-11	PLUG, CONNECTOR 3P			
CN2803	1-695-915-11	TAB (CONTACT)			
		<DIODE>			
D2800	8-719-302-43	EL1Z			
D2801	8-719-911-19	1SS119-25			
D2802	8-719-911-19	1SS119-25			
D2803	8-719-911-19	1SS119-25			
		<IC>			
IC2800	8-759-701-59	NJM78M09FA			
IC2801	8-759-998-98	LM358D			
		<COIL>			
L2800	1-406-989-71	INDUCTOR	0UH		
L2802	1-406-987-11	INDUCTOR	4.7MH		
L2803	1-406-986-11	INDUCTOR	3.3MH		
L2804	1-406-678-11	INDUCTOR	15MH		
		<TRANSISTOR>			
Q2800	8-729-119-78	2SC2785-HFE			
Q2801	8-729-195-82	2SC2958			
Q2802	8-729-017-06	2SC4793			
Q2803	8-729-216-22	2SA1162-G			
Q2804	8-729-230-49	2SC2712-YG			

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

D3 **H3** **J3**

REF NO.	PART NO.	DESCRIPTION			REMARK
		<RESISTOR>			
R2800	1-249-405-11	CARBON	100	5%	1/4W
R2802	1-260-111-11	CARBON	10K	5%	1/2W
R2803	1-260-111-11	CARBON	10K	5%	1/2W
R2804	1-216-061-00	RES-CHIP	3.3K	5%	1/10W
R2805	1-216-097-61	RES-CHIP	100K	5%	1/10W
R2806	1-247-839-31	CARBON	2.2K	5%	1/4W
R2807	1-249-420-11	CARBON	1.8K	5%	1/4W
R2808	1-215-857-11	METAL OXIDE	10	5%	1W
R2809	1-216-059-61	RES-CHIP	2.7K	5%	1/10W
R2810	1-216-049-61	RES-CHIP	1K	5%	1/10W
R2811	1-216-069-61	RES-CHIP	6.8K	5%	1/10W
R2812	1-216-081-61	RES-CHIP	22K	5%	1/10W
R2813	1-216-059-61	RES-CHIP	2.7K	5%	1/10W
R2814	1-216-121-61	RES-CHIP	1M	5%	1/10W
R2815	1-216-085-00	METAL CHIP	33K	5%	1/10W
R2816	1-216-107-00	METAL CHIP	270K	5%	1/10W
R2817	1-216-107-00	METAL CHIP	270K	5%	1/10W
		<TRANSFORMER>			
T2800	1-413-059-00	TRANSFORMER, FERRITE (DFT)			
**********					
	A-1377-018-A	H3 BOARD MOUNTED (NOT SUPPLY)			
		**********			
	* 4-055-304-01	HOLDER, LED			
		<CAPACITOR>			
C3910	1-126-947-11	ELECT	47UF	20.00%	16V
C3911	1-126-947-11	ELECT	47UF	20.00%	16V
C3912	1-102-114-00	CERAMIC	470PF	10.00%	50V
		<CONNECTOR>			
CN3601	* 1-580-844-11	PIN, CONNECTOR (POWER)			
CN3602	* 1-580-844-11	PIN, CONNECTOR (POWER)			
CN3901	1-564-507-21	PLUG, CONNECTOR 4P			
CN3902	1-564-509-11	PLUG, CONNECTOR 6P			
CN3903	1-564-507-11	PLUG, CONNECTOR 4P			
CN3904	* 1-564-512-11	PLUG, CONNECTOR 9P			
CN3905	* 1-564-512-11	PLUG, CONNECTOR 9P			
		<DIODE>			
D3905	8-719-070-16	NNCD9.1A-T1			
D3906	8-719-083-18	DIODE SPB-25MVWF			
D3908	8-719-070-16	NNCD9.1A-T1			
		<IC>			
IC3901	8-742-134-01	SBX1981-51RP			

REF NO.	PART NO.	DESCRIPTION			REMARK
		<JACK>			
J3901	1-750-264-11	JACK			
J3903	1-770-329-11	JACK, PIN 3P			
		<TRANSISTOR>			
Q3901	8-729-030-02	DTC144ESA			
Q3902	8-729-030-02	DTC144ESA			
		<RESISTOR>			
R3907	1-249-426-11	CARBON	5.6K	5%	1/4W
R3908	1-247-823-31	CARBON	470	5%	1/4W
R3909	1-249-417-11	CARBON	1K	5%	1/4W
R3910	1-249-420-11	CARBON	1.8K	5%	1/4W
R3911	1-249-411-11	CARBON	330	5%	1/4W
R3912	1-247-843-11	CARBON	3.3K	5%	1/4W
R3913	1-247-855-31	CARBON	10K	5%	1/4W
R3914	1-249-411-11	CARBON	330	5%	1/4W
R3915	1-247-855-31	CARBON	10K	5%	1/4W
R3916	1-249-401-11	CARBON	47	5%	1/4W
R3920	1-247-807-31	CARBON	100	5%	1/4W
R3921	1-247-807-31	CARBON	100	5%	1/4W
		<SWITCH>			
S3601	⚠ 1-571-433-21	SWITCH, PUSH (AC POWER)			
S3902	1-692-431-21	SWITCH, TACTILE			
S3903	1-692-431-21	SWITCH, TACTILE			
S3904	1-692-431-21	SWITCH, TACTILE			
S3905	1-692-431-21	SWITCH, TACTILE			
S3906	1-692-431-21	SWITCH, TACTILE			
S3907	1-692-431-21	SWITCH, TACTILE			
S3908	1-692-431-21	SWITCH, TACTILE			
**********					
	A-1388-329-A	J3 BOARD MOUNTED (NOT SUPPLY)			
		**********			
		<CONNECTOR>			
CN3451	* 1-564-518-11	PLUG, CONNECTOR 3P			
		<DIODE>			
D3451	8-719-110-72	RD30ESB2			
D3452	8-719-110-72	RD30ESB2			
D3453	8-719-110-72	RD30ESB2			
D3454	8-719-110-72	RD30ESB2			
		<JACK>			
J3451	1-694-467-11	TERMINAL, PUSH (2P)			
**********					

K1 V1

REF NO.	PART NO.	DESCRIPTION			REMARK
	A-1380-656-A	K1 BOARD MOUNTED (NOT SUPPLY)			
		**********			
	4-382-854-11	SCREW (M3X10), P, SW (+)			
		<CAPACITOR>			
C4201	1-126-961-11	ELECT	2.2UF	20.00%	50V
C4202	1-126-961-11	ELECT	2.2UF	20.00%	50V
C4203	1-130-495-00	MYLAR	0.1UF	5.00%	50V
C4204	1-126-961-11	ELECT	2.2UF	20.00%	50V
C4205	1-130-495-00	MYLAR	0.1UF	5.00%	50V
C4206	1-126-964-51	ELECT	10UF	20.00%	50V
C4208	1-126-934-11	ELECT	220UF	20.00%	16V
C4209	1-126-943-11	ELECT	2200UF	20.00%	25V
C4210	1-126-961-11	ELECT	2.2UF	20.00%	50V
C4211	1-126-961-11	ELECT	2.2UF	20.00%	50V
C4212	1-128-551-11	ELECT	22UF	20.00%	25V
C4213	1-126-952-11	ELECT	1000UF	20.00%	35V
C4214	1-126-943-11	ELECT	2200UF	20.00%	25V
C4215	1-126-933-11	ELECT	100UF	20.00%	16V
C4216	1-126-934-11	ELECT	220UF	20.00%	16V
C4217	1-126-964-51	ELECT	10UF	20.00%	50V
C4273	1-126-964-51	ELECT	10UF	20.00%	50V
		<CONNECTOR>			
CN4201 *	1-564-510-11	PLUG, CONNECTOR 7P			
CN4202	1-564-507-11	PLUG, CONNECTOR 4P			
CN4203	1-564-506-11	PLUG, CONNECTOR 3P			
CN4204	1-564-507-41	PLUG, CONNECTOR 4P			
		<DIODE>			
D4205	8-719-911-19	1SS119-25			
		<IC>			
IC4200	8-759-980-43	TDA2009A			
		<IC LINK>			
PS4200	1-532-675-21	LINK, IC 1.5A/150V			
		<TRANSISTOR>			
Q4201	8-729-120-28	2SC1623-L5L6			
Q4203	8-729-120-28	2SC1623-L5L6			
Q4205	8-729-120-28	2SC1623-L5L6			
Q4206	8-729-224-62	2SK246-GR			
		<RESISTOR>			
R4201	1-249-377-11	CARBON	0.47	5%	1/4W
R4202	1-249-377-11	CARBON	0.47	5%	1/4W
R4203	1-216-063-61	RES-CHIP	3.9K	5%	1/10W
R4204	1-216-063-61	RES-CHIP	3.9K	5%	1/10W
R4205	1-216-051-61	RES-CHIP	1.2K	5%	1/10W
R4206	1-216-061-00	RES-CHIP	3.3K	5%	1/10W
R4207	1-216-067-00	METAL CHIP	5.6K	5%	1/10W
R4208	1-216-073-61	RES-CHIP	10K	5%	1/10W
R4209	1-216-065-61	RES-CHIP	4.7K	5%	1/10W
R4210	1-216-073-61	RES-CHIP	10K	5%	1/10W
R4211	1-216-059-61	RES-CHIP	2.7K	5%	1/10W
R4212	1-216-049-61	RES-CHIP	1K	5%	1/10W
R4213	1-216-065-61	RES-CHIP	4.7K	5%	1/10W
R4214	1-216-041-61	RES-CHIP	470	5%	1/10W
R4215	1-216-025-61	RES-CHIP	100	5%	1/10W
R4217	1-216-025-61	RES-CHIP	100	5%	1/10W
R4218	1-249-441-11	CARBON	100K	5%	1/4W
R4219	1-216-097-61	RES-CHIP	100K	5%	1/10W
R4221	1-249-426-11	CARBON	5.6K	5%	1/4W
R4222	1-247-855-31	CARBON	10K	5%	1/4W
R4230	1-216-057-61	RES-CHIP	2.2K	5%	1/10W

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	A-1347-163-A	V1 BOARD COMPLETE (NOT SUPPLY)			
		**********			
		<CAPACITOR>			
C801	1-126-947-11	ELECT	47UF	20.00%	16V
C805	1-163-038-00	CERAMIC CHIP	0.1UF		25V
C806	1-163-038-00	CERAMIC CHIP	0.1UF		25V
C814	1-164-232-11	CERAMIC CHIP	0.01UF	10.00%	50V
C815	1-163-251-11	CERAMIC CHIP	100PF	5.00%	50V
C816	1-164-505-51	CERAMIC CHIP	2.2UF	10%	16V
C817	1-164-004-51	CERAMIC CHIP	0.1UF	10.00%	25V
C818	1-163-239-51	CERAMIC CHIP	33PF	5.00%	50V
C820	1-163-239-51	CERAMIC CHIP	33PF	5.00%	50V
C821	1-163-038-00	CERAMIC CHIP	0.1UF		25V
C822	1-163-009-11	CERAMIC CHIP	0.001UF	10.00%	50V
C823	1-126-933-11	ELECT	100UF	20.00%	16V
C826	1-126-963-11	ELECT	4.7UF	20.00%	50V
C829	1-163-113-00	CERAMIC CHIP	68PF	10%	50V
C830	1-163-038-00	CERAMIC CHIP	0.1UF		25V
C831	1-126-933-11	ELECT	100UF	20.00%	16V
C832	1-126-964-51	ELECT	10UF	20.00%	50V
C835	1-163-038-00	CERAMIC CHIP	0.1UF		25V
C837	1-126-933-11	ELECT	100UF	20.00%	16V
		<CONNECTOR>			
CN801 *	1-774-812-11	CONNECTOR, BOARD TO BOARD 7P			
CN803 *	1-774-812-11	CONNECTOR, BOARD TO BOARD 7P			
		<DIODE>			
D802	8-719-914-44	DAP202K			
D803	8-719-105-46	RD3.3M-B2			
D804	8-719-105-91	RD5.6M-B2			
D806	8-719-988-61	1SS355TE-17			
D807	8-719-988-61	1SS355TE-17			
		<FERRITE BEAD>			
FB801	1-410-397-21	FERRITE	1.1UH		
FB802	1-410-397-21	FERRITE	1.1UH		
FB803	1-410-397-21	FERRITE	1.1UH		

V1 VM1

REF NO.	PART NO.	DESCRIPTION			REMARK
FB804	1-410-682-31	INDUCTOR	470UH		
FB805	1-410-397-21	FERRITE	1.1UH		
		<IC>			
IC801	8-759-476-87	SAA5261			
		<CHIP CONDUCTOR>			
JR801	1-216-295-61	SHORT CHIP	0		
JR802	1-216-295-61	SHORT CHIP	0		
JR804	1-216-295-61	SHORT CHIP	0		
JR805	1-216-295-61	SHORT CHIP	0		
JR806	1-216-295-61	SHORT CHIP	0		
JR807	1-216-295-61	SHORT CHIP	0		
JR808	1-216-295-61	SHORT CHIP	0		
		<TRANSISTOR>			
Q801	8-729-120-28	2SC1623-L5L6			
Q803	8-729-120-28	2SC1623-L5L6			
Q805	8-729-120-28	2SC1623-L5L6			
Q806	8-729-120-28	2SC1623-L5L6			
Q807	8-729-120-28	2SC1623-L5L6			
Q808	8-729-120-28	2SC1623-L5L6			
Q810	8-729-120-28	2SC1623-L5L6			
Q811	8-729-019-01	2SD2394-EF			
Q812	8-729-120-28	2SC1623-L5L6			
Q813	8-729-120-28	2SC1623-L5L6			
Q814	8-729-120-28	2SC1623-L5L6			
Q817	8-729-900-53	DTC114EK			
Q818	8-729-120-28	2SC1623-L5L6			
		<RESISTOR>			
R800	1-208-806-11	METAL CHIP	10K	0.5%	1/10W
R801	1-216-295-61	SHORT CHIP	0		
R802	1-216-025-61	RES-CHIP	100	5%	1/10W
R803	1-216-295-61	SHORT CHIP	0		
R804	1-216-295-61	SHORT CHIP	0		
R805	1-216-295-61	SHORT CHIP	0		
R807	1-216-295-61	SHORT CHIP	0		
R813	1-216-295-61	SHORT CHIP	0		
R820	1-216-073-61	RES-CHIP	10K	5%	1/10W
R821	1-216-083-61	RES-CHIP	27K	5%	1/10W
R822	1-216-025-61	RES-CHIP	100	5%	1/10W
R824	1-216-295-61	SHORT CHIP	0		
R825	1-216-295-61	SHORT CHIP	0		
R827	1-216-295-61	SHORT CHIP	0		
R828	1-216-025-61	RES-CHIP	100	5%	1/10W
R829	1-216-025-61	RES-CHIP	100	5%	1/10W
R830	1-216-295-61	SHORT CHIP	0		
R831	1-216-295-61	SHORT CHIP	0		
R832	1-208-790-11	METAL CHIP	2.2K	0.5%	1/10W
R835	1-216-295-61	SHORT CHIP	0		
R839	1-216-655-11	METAL CHIP	1.5K	0.5%	1/10W
R841	1-216-025-61	RES-CHIP	100	5%	1/10W
R842	1-216-065-61	RES-CHIP	4.7K	5%	1/10W
R843	1-216-065-61	RES-CHIP	4.7K	5%	1/10W
R844	1-216-057-61	RES-CHIP	2.2K	5%	1/10W
R845	1-216-049-61	RES-CHIP	1K	5%	1/10W
R846	1-216-049-61	RES-CHIP	1K	5%	1/10W

REF NO.	PART NO.	DESCRIPTION			REMARK
R847	1-216-049-61	RES-CHIP	1K	5%	1/10W
R848	1-216-049-61	RES-CHIP	1K	5%	1/10W
R849	1-216-049-61	RES-CHIP	1K	5%	1/10W
R850	1-216-105-61	METAL CHIP	220K	5%	1/10W
R851	1-216-057-61	RES-CHIP	2.2K	5%	1/10W
R853	1-216-067-00	METAL CHIP	5.6K	5%	1/10W
R857	1-216-081-61	RES-CHIP	22K	5%	1/10W
R858	1-216-067-00	METAL CHIP	5.6K	5%	1/10W
R861	1-216-049-61	RES-CHIP	1K	5%	1/10W
R862	1-260-095-11	CARBON	470	5%	1/2W
R863	1-216-049-61	RES-CHIP	1K	5%	1/10W
R864	1-216-041-61	RES-CHIP	470	5%	1/10W
R866	1-215-880-00	METAL OXIDE	10	5%	2W
R871	1-216-037-61	RES-CHIP	330	5%	1/10W
R879	1-216-073-61	RES-CHIP	10K	5%	1/10W
R880	1-216-041-61	RES-CHIP	470	5%	1/10W
R882	1-216-049-61	RES-CHIP	1K	5%	1/10W
R884	1-216-025-61	RES-CHIP	100	5%	1/10W
R888	1-216-065-61	RES-CHIP	4.7K	5%	1/10W
R889	1-216-073-61	RES-CHIP	10K	5%	1/10W
R890	1-216-081-61	RES-CHIP	22K	5%	1/10W
R894	1-216-073-61	RES-CHIP	10K	5%	1/10W
R895	1-216-065-61	RES-CHIP	4.7K	5%	1/10W
R896	1-216-073-61	RES-CHIP	10K	5%	1/10W
R897	1-216-073-61	RES-CHIP	10K	5%	1/10W
R898	1-216-065-61	RES-CHIP	4.7K	5%	1/10W
		<CRYSTAL>			
X801	1-578-774-11	VIBRATOR, CRYSTAL			

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	A-1342-566-A	VM1 BOARD MOUNTED (NOT SUPPLY)			
		**********			
	4-382-854-11	SCREW (M3X10), P, SW (+)			
		<CAPACITOR>			
C5902	1-126-940-11	ELECT	330UF	20.00%	16V
C5903	1-161-830-00	CERAMIC	0.0047UF		500V
C5905	1-126-935-11	ELECT	470UF	20.00%	10V
C5906	1-130-491-00	MYLAR	0.047UF	5.00%	50V
C5907	1-107-638-11	ELECT	33UF	20.00%	160V
C5908	1-107-368-11	MYLAR	0.047UF	99%	200V
C5909	1-126-933-11	ELECT	100UF	20.00%	16V
C5910	1-130-471-51	MYLAR	0.001UF	5.00%	50V
C5911	1-107-949-11	ELECT	2.2UF	20.00%	160V
C5912	1-104-999-11	MYLAR	0.1UF	10.00%	200V
C5913	1-130-471-51	MYLAR	0.001UF	5.00%	50V
C5914	1-126-933-11	ELECT	100UF	20.00%	16V
C5916	1-130-491-00	MYLAR	0.047UF	5.00%	50V
C5917	1-126-935-11	ELECT	470UF	20.00%	10V
C5918	1-115-341-51	CERAMIC	120PF	10.00%	500V
C5920	1-126-964-51	ELECT	10UF	20.00%	50V
C5921	1-102-852-91	CERAMIC	47PF	5.00%	50V

The components identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

VM1

REF NO.	PART NO.	DESCRIPTION			REMARK
		<CONNECTOR>			
CN2801	1-564-506-11	PLUG, CONNECTOR 3P			
CN5901 *	1-564-510-11	PLUG, CONNECTOR 7P			
CN5904 *	1-770-723-11	CONNECTOR, BOARD TO BOARD 8P			
		<DIODE>			
D5901	8-719-911-19	1SS119-25			
D5901	8-719-991-33	1SS133T-77			
D5902	8-719-110-88	RD39ES-B2			
D5903	8-719-911-19	1SS119-25			
D5903	8-719-991-33	1SS133T-77			
D5904	8-719-110-88	RD39ES-B2			
D5905	8-719-911-19	1SS119-25			
D5905	8-719-991-33	1SS133T-77			
D5906	1-247-809-31	CARBON	120	5%	1/4W
D5907	1-247-809-31	CARBON	120	5%	1/4W
		<COIL>			
L5901	1-414-187-11	INDUCTOR	47UH		
L5902	1-414-856-11	INDUCTOR	10UH		
		<TRANSISTOR>			
Q5901	8-729-230-45	2SC2458-YGR			
Q5902	8-729-809-26	2SA1606-E			
Q5903	8-729-230-45	2SC2458-YGR			
Q5904	8-729-026-39	2SA933AS-QT			
Q5904	8-729-119-76	2SA1175-HFE			
Q5905	8-729-230-45	2SC2458-YGR			
Q5906	8-729-809-29	2SC4159-E			
Q5908	8-729-119-78	2SC2785-HFE			
Q5908	8-729-230-45	2SC2458-YGR			
Q5909	8-729-119-78	2SC2785-HFE			
Q5909	8-729-230-45	2SC2458-YGR			
		<RESISTOR>			
R5901	1-249-409-11	CARBON	220	5%	1/4W
R5902	1-249-414-11	CARBON	560	5%	1/4W
R5903	1-247-734-11	CARBON	39	5%	1/2W
R5904	1-249-411-11	CARBON	330	5%	1/4W
R5905	1-249-417-11	CARBON	1K	5%	1/4W
R5906	1-249-417-11	CARBON	1K	5%	1/4W
R5907	1-249-417-11	CARBON	1K	5%	1/4W
R5908	1-249-383-11	CARBON	1.5	5%	1/4W
R5909	1-249-409-11	CARBON	220	5%	1/4W
R5910	1-249-403-11	CARBON	68	5%	1/4W
R5911	1-249-439-11	CARBON	68K	5%	1/4W
R5912	1-249-437-11	CARBON	47K	5%	1/4W
R5914	1-249-403-11	CARBON	68	5%	1/4W
R5915	1-247-855-31	CARBON	10K	5%	1/4W
R5916	1-249-419-11	CARBON	1.5K	5%	1/4W
R5917	1-249-416-11	CARBON	820	5%	1/4W
R5918	1-247-855-31	CARBON	10K	5%	1/4W
R5919	1-249-417-11	CARBON	1K	5%	1/4W
R5920	1-249-439-11	CARBON	68K	5%	1/4W
R5921	1-216-476-11	METAL OXIDE	180	5%	3W
R5922	1-247-825-31	CARBON	560	5%	1/4W
R5923	1-249-383-11	CARBON	1.5	5%	1/4W
R5925	1-249-400-11	CARBON	39	5%	1/4W
R5929	1-215-880-00	METAL OXIDE	10	5%	2W
R5930	1-247-823-31	CARBON	470	5%	1/4W
R5931	1-247-823-31	CARBON	470	5%	1/4W
R5932	1-247-823-31	CARBON	470	5%	1/4W
R5933	1-247-823-31	CARBON	470	5%	1/4W
R5934	1-249-430-11	CARBON	12K	5%	1/4W
R5935	1-247-855-31	CARBON	10K	5%	1/4W

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ACCESSORIES AND PACKING MATERIALS
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	3-701-910-00	SCREW, SPECIAL (DIA. 3.8X20)
*	4-029-168-01	BAG, PROTECTION
*	4-054-319-01	TRAY
	4-065-210-01	JOINT
*	4-066-924-03	INDIVIDUAL CARTON
	4-392-003-11	BAND, HOLD
	4-392-004-11	CLIP

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REMOTE COMMANDER
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1-418-163-12	REMOTE COMMANDER (RM-952)
9-939-697-01	BATTERY COVER REMOTE COMMANDER

Sony Corporation
Sony Technology Malaysia Sdn. Bhd.
Visual Products General Area

9-872-263-01

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